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THE COMMUNICATION OF USEABLE FEEDBACK FROM TAPE RECORDINGS
OF CLASSROOM INTERACTION IN A TEACHER INSERVICE
TRAINING PROGRAM: A PILOT STUDY

BY

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A THESIS

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The undersigned certify that they have read,
and recommend to the Faculty of Graduate Studies for
acceptance, a thesis entitled "The Communication of
Useable Feedback from Tape Recordings of Classroom
Interaction in a Teacher Inservice Training Program:
A Pilot Study" submitted by Robert Arthur Rosborough
in partial fulfilment of the requirements for the
degree of Master of Education.

ABSTRACT

The purpose of this study was to attempt to demonstrate the effectiveness of tape recording as an instrument for growth or change for classroom teachers by examining class-teacher interaction on tape.

Twenty-five teachers from each of Eastglen Composite High School and McNally High School were pretested with the Personal Orientation Inventory in December, 1965. On the basis of the test results and the location of the schools, four teachers from Eastglen were chosen as the experimental group and four teachers from McNally were chosen as the control group.

The teachers in the experimental group made tape recordings of classroom interaction, and held individual and group discussions with the consultant for two hours respectively each week for a period of four months.

The eight teachers were again tested at the end of four months with the Personal Orientation Inventory.

The hypothesis tested was that teachers undergoing the inservice training experience proposed would become more self-actualized as measured by the P.O.I. A comparison of the profiles obtained failed to show any significant differences between the control and experimental group.

Although the hypothesis was not supported, this research revealed that the experimental group found value in their experiences and that further research using a longer period of time is indicated.

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CHAPTER I

INTRODUCTION

Scarfe (5), summarizes clearly a shift in the basic orientation to education which our times have necessitated.

Formerly, the process could be characterized as the education of the few in an academic, formal curriculum, using a didactic verbal method of instruction. A relatively stable society resulted in an unchanging curriculum and conformity in the education of the ruling or controlling elite. Emphasis was on learning the wisdom of the past by memorization and regurgitation and this emphasis resulted in conservative, conforming behavior (5).

Presently, we have almost compulsory secondary education: democratic schools which are no longer purely formal or strictly academic. Pupils learn to perceive, analyze, categorize, differentiate, and synthesize for themselves about individual, political, mathematical, scientific, and social problems with appropriate language skills for communication.

According to Scarfe, the traditional mode of educating resulted in conservative, conforming behavior by a rigid type of person. Many recent writers have emphasized that the exponential rate of change which

characterizes our times will require people who are more flexible if they are to be able to cope in the world of work. The need for creative and flexible people requires a different approach in education and therefore a change in the orientation of teachers.

Changing a person's orientation, such as changing his value system, is very difficult even if he desires a change. One possible means of causing this change might be the use of tape recordings of actual classroom interaction and consultation (individual and group) regarding goals, purposes, techniques, and results as revealed by the examination of the tapes.

Another indication of the need for this research can be found in the Appraisal Team Report (1).

Instructional procedures might be more varied. Class periods are invariably teacher-dominated without sufficient regard for student participation or development of skills relative to intellectual understanding, selective reading, or analytical judgment. Many teachers need assistance on how to question--or how to relate examination questions to the objectives of courses and to the ideas of some taxonomy of cognitive domain. Teachers might be encouraged to promote purposeful discussions intended to promote intellectual curiosity and divergent thinking so that conformity may not produce similarity that negates potentiality and creativeness. Perhaps there should be less concern about acceptance and social adjustment and more regard for self-percepts in order that potentiality may be more fully realized. This does not deny the value of humanistic concern for the common good and the need of commitment concerning attitudes and values.

Supervisory aid might include more inter-visitations, classroom visits, demonstration teaching, and means of analyzing the elements of good instructional procedures.

The writers of this report are vague as to a practical remedy for the problems which they have observed. Perhaps supervisory aid along the lines of this experiment, as explained in Chapter III, would serve the expressed need.

An anecdote to further illustrate the need for a change in the orientation of teachers was given at the Edmonton Teachers' Convention in February, 1966. Dr. O. Christenson of Oregon gave this example. The overprotective mother of a son of about ten years of age did everything for her son. She made his bed, tied his shoes, fed him, dressed him, and even blew his nose for him. In time she began to worry because he could do none of these things for himself and she went for help. It was apparent that the reason for her over-protectiveness was not to help her son but to satisfy her own need to feel important.

In a similar way, some teachers organize, plan, prepare equipment, and lecture about particular subject matter. The students listen, memorize, and regurgitate, but both the students and the son are in over-dependency positions. Just as it is likely that if the mother continues to do everything for her son he will not become independent and able to function on his own, so too, students under the traditional system are unlikely to

be able to cope on their own--to do for themselves--because they are used to having the teacher do their thinking for them.

The remedy for the first situation seems easy, but consider the mother. If the counselor were to help her to see that her behavior was harming her son rather than helping him, she might suddenly insist that the boy do everything for himself. This would not be possible because the boy would have had no practice in learning to do for himself. Furthermore, how would the mother get satisfaction for her need to be needed? Similarly, teachers, who satisfy their need to be important by mastering their subject area and then showing their students how much they know, find it very difficult to take a two-step approach; that is, to get their satisfaction not directly by demonstrating their skill, but by learning a new skill; that of assisting students to grow to a position of being able to do the organization of material and time. In other words, teachers would obtain their satisfaction from seeing others learn how to learn rather than from displaying the extent of their knowledge through the use of the lecture method alone.

Bowers and Soar (3) and Flanders (7) suggest that the shift in educational emphasis from content to process but retaining a measure of content, requires a shift in

the orientation of teachers from teacher-centered to student-centered.

The problem is that many of the teachers whom the writer contacted seem to conceptualize only two styles of leadership. Many recognize the authoritarian or teacher-centered position and as its alternate a laissez-faire position. For some reason they seem to leave out the democratic or student-centered form of leadership. The tendency then is to think that the shift will be from an authoritarian to a laissez-faire position. It is doubtful that an authoritarian or a laissez-faire position can best promote a democratic society.

There are many variables operant in the teacher-student(s) interaction. Much research has been done on trying to determine which of these variables are the most important. For example, some of the variables are: different value systems, intelligence, range and depth of experience, dominant dependent or independent characteristics, past achievement, sex differences, socio-economic background, course content, physical facilities, and organization structure of the school (8). Rather than attempting to isolate only specific items to explain the variance in teacher-student(s) interaction, the present writer suggests the possibility that researchers might also search for a growth process or development scheme which will produce more flexible, fully functioning people.

Such people could change to fit kaleidoscopic situations with enjoyment rather than resist change because of fear. This position is supported by the recent work of Smeltzer (14) which shows that students who have flexible teacher models become more flexible themselves. This would mean that in some classes with some groups of students an authoritarian leadership style might be appropriate initially. However, with experiences for the students which would encourage growth, a movement from the authoritarian position to one of democratic leadership is possible.

The need for a teacher development scheme is further supported by the ready acceptance of the experimental idea by the principals and teachers of the schools who participated. The question which is commonly asked is, how can a change in flexibility be effected? The purpose of this study is to suggest one method that might bring about such a change. It is an attempt to demonstrate the use of tape recordings as the instrument, or lever for growth or change in orientation for classroom teachers with a concomitant improvement in job satisfaction that would go along with such a change.

The research problem is: Can a shift in the orientation of teachers, as measured by the Personal Orientation Inventory (13), be effected by the communication of useable feedback from tape recordings of

classroom interaction?

SUMMARY

The introduction starts with an orientation to the problem from Scarfe (5). His summary clearly states the need for a shift in the basic orientation to education. In addition an excerpt from the Appraisal Team Report (1) would seem to support the need for this kind of research. The Team Report emphasizes the teacher-dominated nature of our present system. A comparison between overprotective parents and teachers using only the lecture method is presented to demonstrate the effects of such a system on a child in a family and on students in our schools. The case for research on a teacher-development scheme is proposed as an addition to the common factor analysis approach to good teaching. The introduction ends with an outline of the purpose of the study and a statement of the research problem.

CHAPTER II

RELATED LITERATURE

Literature related to this problem is surprisingly scarce. However, the research which is available is very interesting and of considerable depth. One of these studies is by Flanders (7). His study is an attempt at "Interaction Analysis" which is a scheme for analyzing the interaction between teacher and class. The Flanders' study breaks talk in the classroom into two parts; Teacher Talk and Student Talk. Teacher Talk has two kinds of influence: First, indirect influence; acceptance of feeling, praise or encouragement, acceptance or use of the ideas of students, and asking questions. Second, direct influence; lecturing, giving directions, and criticizing or justifying authority. Student Talk may be a response to others or initiated by the student. Flanders points out that there is far more direct influence teacher talk in most classrooms than one would guess. This is not a good situation according to Flanders because the involvement and interest of the students are greater when the teacher talk is indirect and when the student talk is of the student initiated variety.

If Flanders is correct in stating that student interest and involvement are greater when teacher talk is indirect and

student talk is of the student initiated variety, then we need some means of producing such a situation. This pilot study is an attempt to provide a teacher-development scheme which would make possible the ideal conditions for learning as described by Flanders.

Another interesting study has been done by Bowers and Soar (3). Their work is the prototype for this research. Their study concerned the problem of a development scheme, and they used the Minnesota Multiphasic Personality Inventory (M.M.P.I.), a measure of psychopathology. The present study uses the Personal Orientation Inventory (P.O.I.), "a measure of positive mental health" (12). Bowers and Soar were trying to develop skills in teachers that would allow them to be indirect in their approach (democratic). The present study attempts to work on the development of the teacher as a whole.

They list four important elements of training:

1. Learning through process rather than content--experiencing or discovering, not communication of content. (This effects the involvement or commitment of the learner.)
2. Increased awareness of one's behavior as seen by others. (This enables the teacher to better articulate, discriminate or categorize the classroom environment.)
3. Opportunity to practice skills in a "safe environment." (That is, an experimental group.)
4. Understanding of group dynamics. (This

involves an improved ability for scanning the classroom in order to analyze the forces operating in the particular class at a particular time.)

(Interpretations in parentheses are those of the writer of this study.)

Other related literature concerns a process called Micro Teaching. Recently teachers in training at Stanford University have been given small classes of five or six students who are hired during the summer for this specific purpose. The teachers are required to teach a specific lesson in a five minute time period. The process is recorded on video tape and the teacher and his consultant examine the interaction, determine strengths and weaknesses, and try experimental approaches. (The research at Stanford University indicates that an experimental design using video tape rather than aural tape would have been a better procedure for this study, but the equipment was not available to the writer at the time of this research. Expenses are also much higher with the use of video tapes.)

Another study, supporting the need for increased flexibility in teachers, is the one by Smeltzer (14). She shows that more flexible teachers produce more flexible students. She defines a flexible person as one who can perceive situations and problems from many different points of view rather than in a stereotyped manner.

SUMMARY

The major strategies of this research come from the studies reported in this chapter on related literature. Flanders' work (7) on Interaction Analysis shows the effect of student-centered versus teacher-centered education. Bowers and Soar (3) provide the concept of Human Relations Training for teachers and the effect it has on the teaching-learning process. Shostrom's measurement instrument the Personal Orientation Inventory (12) (see Appendix 1), provides the evaluation technique. The work at Stanford University on Micro Teaching shows the value of tape or video recording for the provision of useable feedback to the subjects of the experiment. Smeltzer's study (14) shows the correlation between flexible teachers and the development of flexible students.

CHAPTER III

PROCEDURE

The research hypothesis of this thesis is that teachers, undergoing the inservice training experience proposed, will become more self-actualized as defined and measured by the Personal Orientation Inventory.

The scope of this pilot study is a limited one because of the time available to the teachers and the writer (consultant). The teachers and consultant carried regular teaching and counseling loads in addition to the experiment. A statistical treatment of the results is not possible because of the sample size which reduces the number of degrees of freedom to the point of statistical non-significance.

Operational Definitions

Some words and phrases in this paper have a specific meaning.

Feedback -- information about the results of one's behavior. In this instance, the tape recordings allow the teacher to "stand off" and examine the interaction in the classroom as if he were hearing someone else. This provides information in a useable form (3).

Self-Actualization -- a person who is more fully functioning and lives a more enriched life than does the average person is defined as self-actualized (13). The major factors in Self-actualization as defined in the Personal Orientation Inventory are: Time Competence Ratio (see Appendix One, page 15); Self-support Ratio (see Appendix One, page 17).

Flexible Person -- one who can perceive situations and problems from many different points of view rather than in a stereotyped manner (14).

I. SELECTION OF TEACHERS

The selection of teachers was the first step of the procedure for this study. The Personal Orientation Inventory was administered to twenty-five teacher volunteers from each of two high schools in the City of Edmonton. Eastglen and McNally High Schools were chosen for the study for several reasons. The schools are geographically close together; they serve similar socio-economic areas and they are of approximately the same size. Administrative co-operation was assured as the principals of both schools were interested in developing successful inservice training programs.

The experimental school was Eastglen as the present writer, who acted as consultant to the teachers in the experiment, was employed at that school. The control school was McNally High School.

Four teachers were chosen from each group of twenty-five on the basis of their scores on the Personal Orientation Inventory being closest to the mean. The reason for choosing those closest to the mean on the first P.O.I. test is the result of the Bowers and Soar experiment (3). They found that teachers with average or above average scores on the Minnesota Multiphasic Personality Inventory (M.M.P.I.) improved with Laboratory Human Relations Training, but that teachers with below average scores got worse. Table I contains the details of the number of years of teaching experience and the subjects taught by the teachers of the experimental and control groups.

TABLE I

YEARS OF TEACHING EXPERIENCE AND SUBJECTS
TAUGHT BY THE EXPERIMENTAL AND
CONTROL GROUP TEACHERS

	Experimental Teachers Eastglen				Control Teachers McNally			
	A	B [★]	C	D	A [★]	B	C	D
Years of Teaching Experience	2	4	9	1	2	1	2	2
<u>Subjects Taught</u>								
Physical Education	x	x			x			
Mathematics	x						x	
English		x		x				
German			x					
Economics			x					
Science						x		x
Social Studies				x				
Biology					x	x		

★ Female

The twenty-one teachers from each school who were not chosen for this pilot study were invited to have their scores on the Personal Orientation Inventory interpreted by the writer if they so desired. Many teachers took advantage of this service.

II. THE PLAN OF THE EXPERIMENTAL PROGRAM

The program consisted of three major activities. A tape recording of two hours of classroom interaction each week. Two hours in individual consultation with the writer (consultant) each week (3). Two hours in group consultation with the other three teachers and the consultant per week.

The program extended over a twenty week period and required forty hours of tape recording in the classroom, forty hours of individual consultation and forty hours of group activity for each teacher. The tape recording was done in regular school hours whereas the individual and group consultation was done after school hours. The frame of reference of the consultant was to assist the teacher to perceive and make explicit the theory on which the teacher was operating and then to consider and to attempt alternatives where a need was indicated. The role of the consultant was similar to that of consultants in counselor training courses which use the Practicum Method. This method has been found to produce positive change in student counselors (6). The Practicum Method consists of tape recording and individual and group examination of the recorded

client-counselor interaction under the supervision of a consultant. There was no attempt to implement any preconceived theory of teaching as the "best" as greater flexibility and openness were the objectives. A person who is open is someone who uses most of his energy in a creative or productive manner rather than using it to maintain an ineffective facade. At the end of the program each group of four teachers completed the P.O.I. once again.

The first testing with the Personal Orientation Inventory was completed in both schools during the month of December, 1965. An initial meeting was held with the four teachers of the experimental group in Eastglen, December 22, 1965. This orientation meeting covered schedules for the use of the tape recorder, for the time of the individual meetings, and the time of the group meetings. A demonstration of the operation of the tape recorder was given and an initial framework from Brown (4) with a discussion of forms of leadership was held. An initial reading from Brown which covers democratic, autocratic, and laissez-faire leadership was assigned. A discussion about the difference between leadership and headship was held (that is, "between leaders who have been freely chosen by the group and those who lead by virtue of formal power") (4).

A resume of the major problems of concern to the experimental group of teachers, taken from the notes made by

the consultant at the individual and group sessions over the four month period of the experiment is as follows:

1. Organization of class groups.
2. The question of class involvement.
3. Questioning techniques.
4. Sensitivity to the make-up of groups and group dynamics.
5. The question of honesty between those in the experimental group.
6. The descriptive dimensional model of behavior as outlined by Dr. C. M. Christensen (University of Calgary) to his class in Educational Psychology 510.

This model consists of a vertical continuum and a horizontal one, see Figure 1. It is used as a model for the categorization of behavior. In this experiment, focusing on the model made it easier for the experimental group to give each other meaningful feedback on the observed behavior of the others in the group. The teachers returned to this model twice during the experiment to find out if the others observed a change in the behavior.

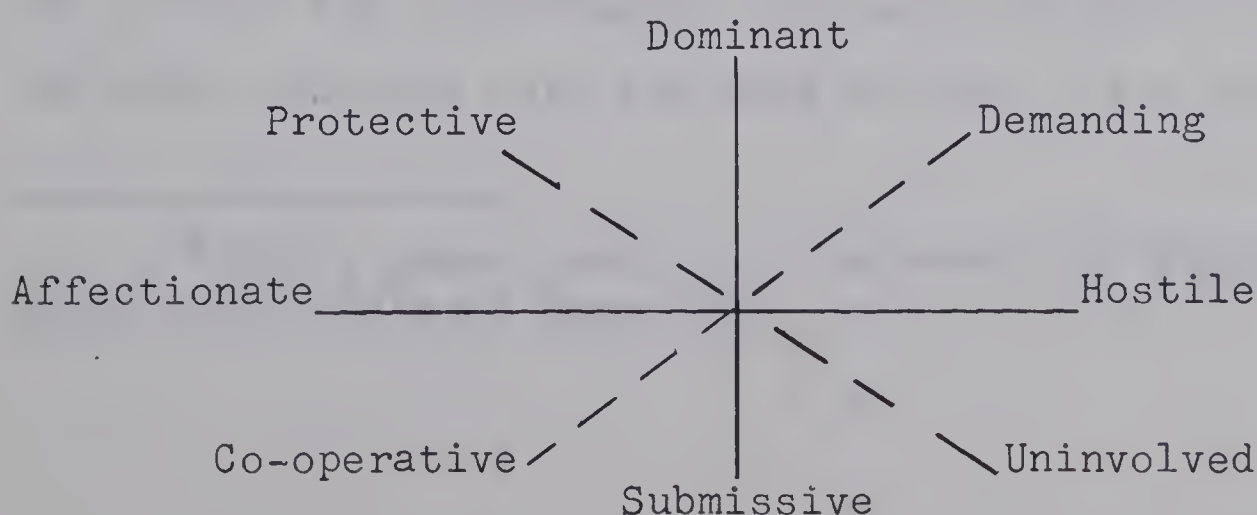


FIGURE 1
A Descriptive Model of Behavior

The process of using the model involved rating each other on the continuums and thus placing each other in a descriptive quadrant. The teachers reported that this information of how others saw their behavior helped them to understand the reactions they received from their students in class, as well as the reaction of other people in their private lives.

7. Facades and daring to be oneself.

8. Job satisfaction, including direct versus indirect satisfaction.

9. The question of class control using sarcasm or other methods, including consideration of the self-image of the student and the fact that learning is better when the student is encouraged rather than discouraged.

10. A summary was made of teaching techniques which evolved in group discussions during the four month experimental period. A comparison was drawn between the list of techniques conceived by the four teachers in the experimental group and a list of nine techniques developed by Bush of Stanford University.* It was interesting to note how similar the list of the experimental teachers and that of Bush were. The major concepts were the same and the lists differed only

*From a paper read at a conference of Edmonton High School Principals in May, 1966.

in wording. The list proposed by the teachers is produced here to show which teaching techniques were of concern to the experimental group.

1. Establishing Set (motivation). This technique begins with thorough preparation of the subject material by the teacher. The students are then taught how to plan and encouraged to do the planning for the work that is to be done. This procedure seems to increase greatly the involvement and interest of the students. It is also noteworthy that the plans outlined by the students are often very similar to the type of planning that is usually done by the teacher alone.

2. Frame of Reference. This technique involves the skill mandatory to provide the students with the parameters of the area to be covered. This is necessary in order to keep the students in the general area of the required curriculum but should leave enough freedom for the expression of individual abilities and interests.

3. Closure. It is sometimes difficult for students to see any pattern to the separate topics which they study, and it requires skill on the part of the teacher to draw together the points of new knowledge so that the whole makes sense. This is one of the skills that the students must learn in order to be able to do for themselves the kind of organization and planning that is usually done by the teacher. This skill must be taught.

4. Effective Questioning. Most of the teachers in the experimental group were very interested in this particular technique. They found it very difficult to ask questions which elicited answers and follow-up questions by the students. In many instances the teacher asked the question, received one response from someone in the class, and then stopped further discussion by giving his opinion as to the correct answer. This limited the interest and involvement of the student in the class. Most of the teachers found it very difficult to shift to a type of questioning which would indicate that real importance was given to the answer of the individual student. The students showed an attitude of why try to answer when our answers are treated lightly anyway. Much time was spent on this point as habits of questioning seem to be very difficult to change.

5. Attending Behavior. The fifth technique is connected to the fourth in that attentiveness by pupils seems to be directly related to the importance that the teacher attaches to the efforts of the student to answer questions. Some teachers express the feeling that students are not really interested in the teachers' particular subject. The experimental group suggested that this might be due to the importance given answers, whether right or wrong, when offered spontaneously by the students.

The teacher must also be able to recognize whether his class is attentive or not at a particular time and to have a repertoire of more than one or two methods of approach so that with inattentiveness a different approach can be instituted.

6. Pupil Control. Methods and techniques of encouraging and discouraging the amount of interaction of pupils in the class was a topic of lively discussion in the group meetings. This involved discussion of positive and negative types of reward to encourage or discourage participation as the case might be.

7. Sensitivity. Sensitivity involves an awareness of what is going on in the classroom. The teachers were surprised, on listening to the tape recordings of their classes, to discover that in attempting to carry the whole responsibility of what was happening in their classrooms rather than shifting some of it to the students, that they were not as sensitive to what was happening as they at first believed. This was one of the major understandings that came out of the experiment; that by letting the students become more involved, the teacher, instead of being totally bound up in his lecturing, was able to act as an observer and be more sensitive to what was happening in his class. He was, therefore, able to do a better job of responding to his pupils. He was also able to make better use of the

information coming from the students as to the success of the particular teaching technique being used.

8. Reward and Punishment. A good deal of discussion dealt with the relative merits of various kinds of rewards and punishment and their effectiveness. Once again, teacher behavior tended to be stereotyped and change was very difficult.

9. Models. This technique has two parts. The first is that the teacher should have access to a master teacher as a model of good teaching in order to analyze, imitate, and develop habits of good teaching. The second part is that the teacher himself should be a good model for his students in such areas as clear thinking, organizational ability, and the ability to adapt to changing situations.

IV. SUMMARY

Chapter III contains the procedure for this pilot study. It begins with the research hypothesis and the scope of the study. Operational definitions for feedback, self-actualization, time-competence ratio, self-support ratio, and flexible person are given. The chapter contains an explanation of the process for the selection of teachers, the plan of the experimental program, and ends with an account of the discussions of the teacher inservice training program.

CHAPTER IV

FINDINGS

The findings of this research are presented in the form of extracts from the Personal Orientation Inventory profiles for the four teachers in the experimental group and the four teachers in the control group. These results are found in Figures 2 to 9.

The P.O.I. profile is made up of two major scales and ten sub-scales. The major scales are separated from the sub-scales by a vertical solid line in each figure. See Figure 10 -- Summary of Major Scales for Experimental and Control Groups.

SCORING CATEGORIES FOR THE PERSONAL ORIENTATION INVENTORY

T_I - Time Incompetence (Misuse)	)	TIME RATIO: TI/TC
T_C - Time Competence (Use)	)	- measures whether or not
	)	use of time is efficient
O - Other Directedness	)	SUPPORT RATIO: O/I
I - Inner Directedness	)	- measures whether reac-
	)	tivity orientation is
	)	basically toward others
	)	or self

SAV - Self-Actualizing Values

Sa - Self Acceptance

Ex - Existentiality

Nc - Nature of Man

Fr - Feeling Reactivity

Sy - Synergy

S - Spontaneity

A - Acceptance of Own
Aggression

Sr - Self Regard

C - Capacity for Intimate
Contact

(For further details see pages 6, 7, and 8 in the P.O.I.
Manual, Appendix 1.)

The focal point of the results is in the portion
of the profiles to the left of the vertical line. (Fig. 2)

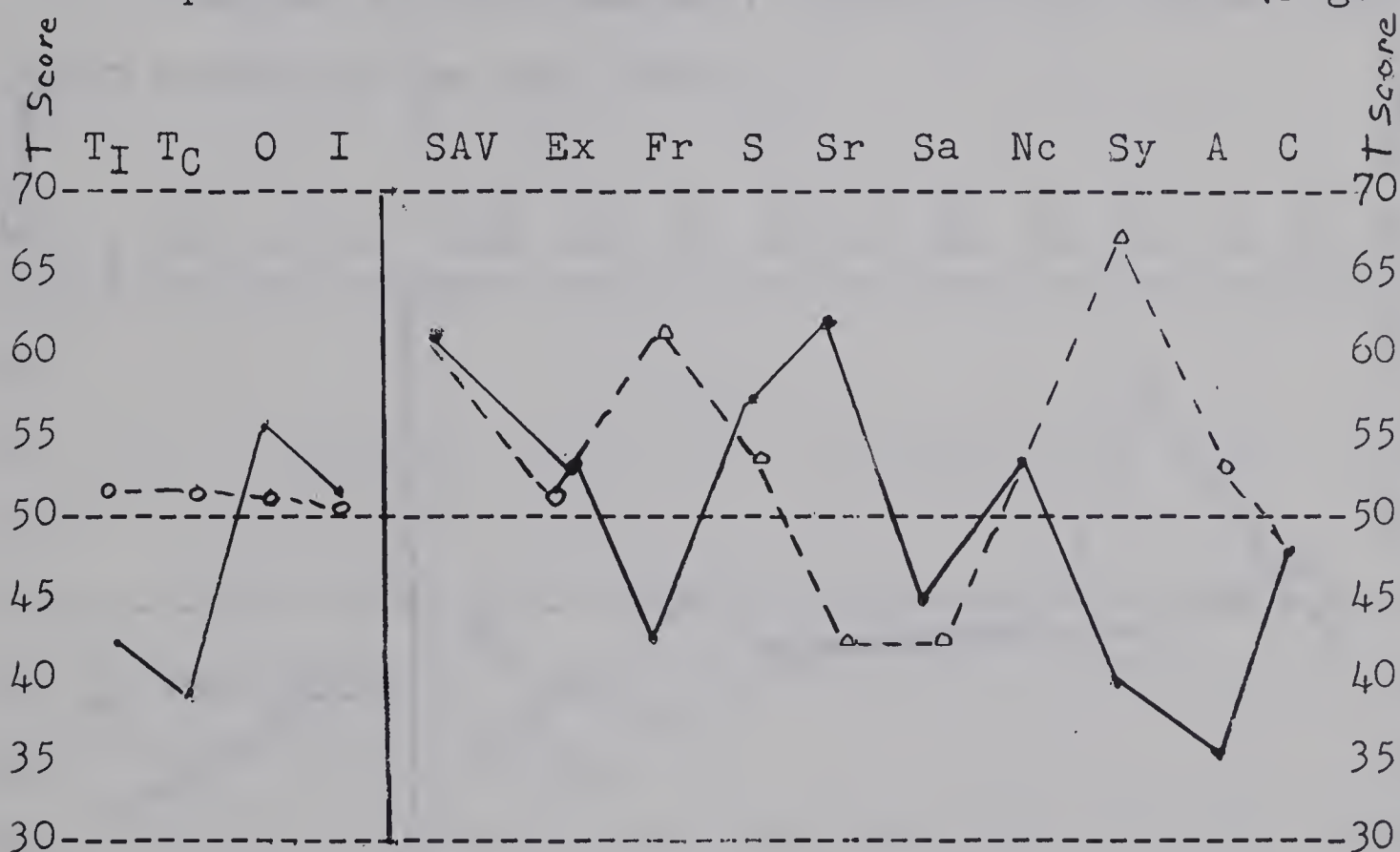


FIGURE 2

P.O.I. PROFILE OF TEACHER A - EXPERIMENTAL GROUP

Legend

○-----○-----○ Pre Test
 ●-----●-----● Post Test

The profile (Figure 2) does not support the premise
that the experimental experience would result in post test

scores on the major scales (TI/TC and O/I) one standard deviation above the pre test scores (19). TI/TC is lower and O/I is higher than the pre test scores on these scales. Four sub-scores Fr, Sr, Sy, and A (see page 23) are at least one standard deviation different. Three sub-scale scores are lower and one is improved. Improved by definition of the P.O.I. means T scores of 60 to 70 or with scores like those individuals who are self-actualized.

Teacher B (Experimental) Figure 3, also shows lower TI/TC scores on the post test.

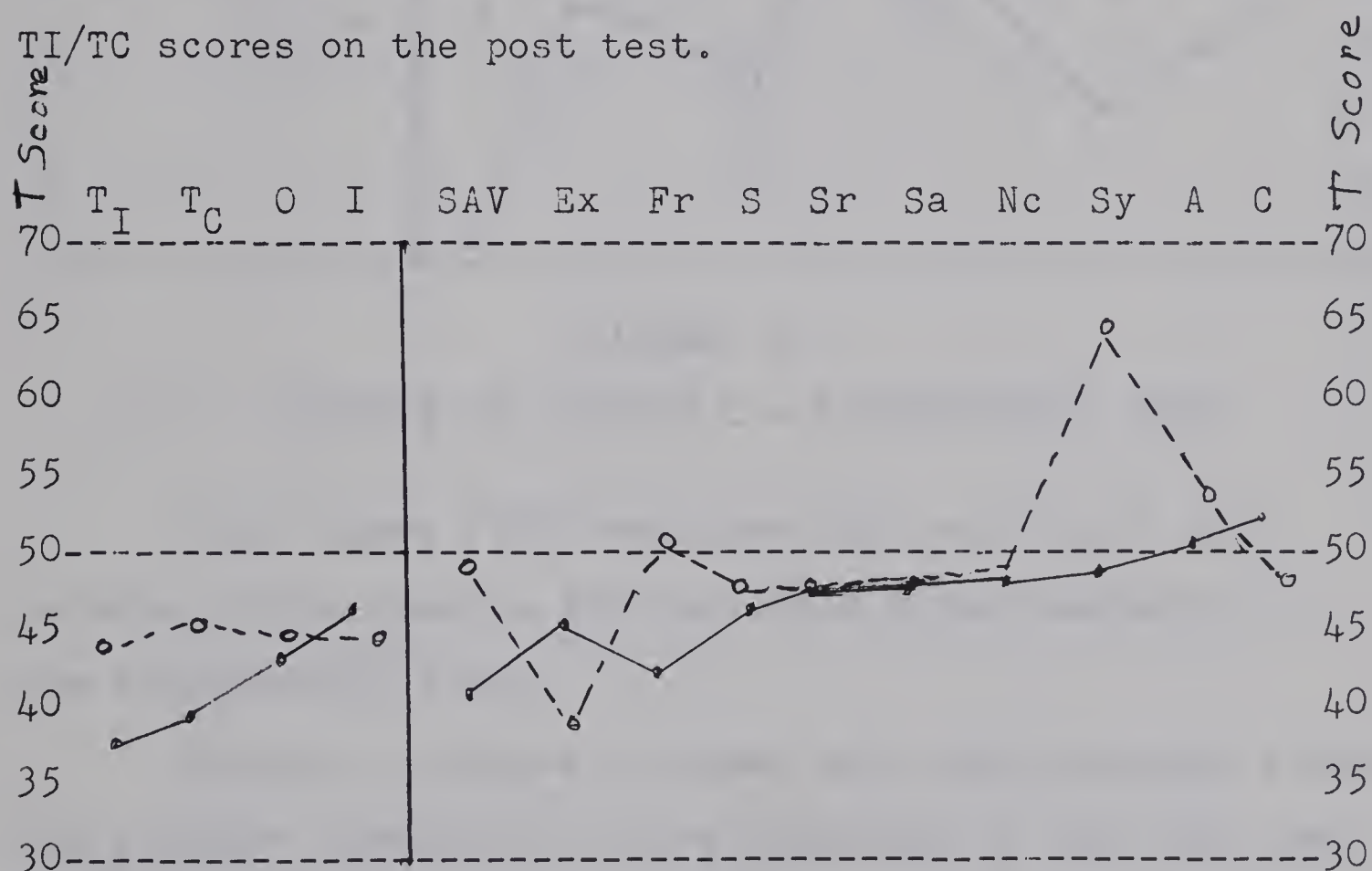


FIGURE 3

P.O.I. PROFILE OF TEACHER B - EXPERIMENTAL GROUP

Teacher B (Figure 3) changed very little on the O/I scales. Only two sub-scores are a standard deviation or more changed: SAV and Sy, both of which were lower on the post test.

Teacher C (Experimental) Figure 4, improved on the TI/TC scale but scored lower on the O/I scale.

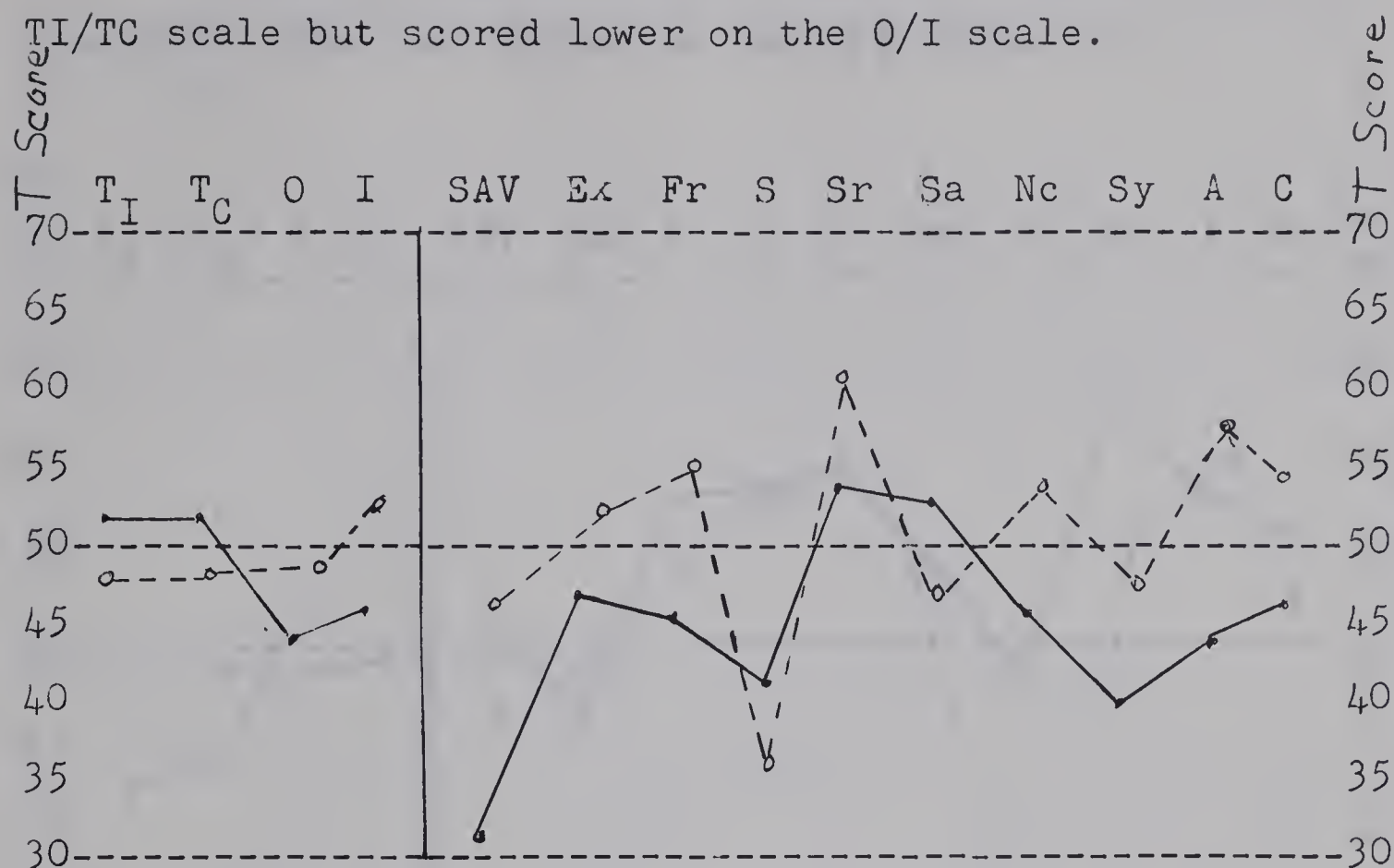


FIGURE 4.

P.O.I. PROFILE OF TEACHER C - EXPERIMENTAL GROUP

This higher TI/TC and lower O/I scoring is the reverse of the results for the other three teachers in the experimental group.

Teacher C (Figure 4) shows only one sub-scale score, one standard deviation or more different on the post test: SAV, and this is a lower score.

Teacher D (Experimental) Figure 5, scored lower on the TI/TC scale and higher on the O/I scale.

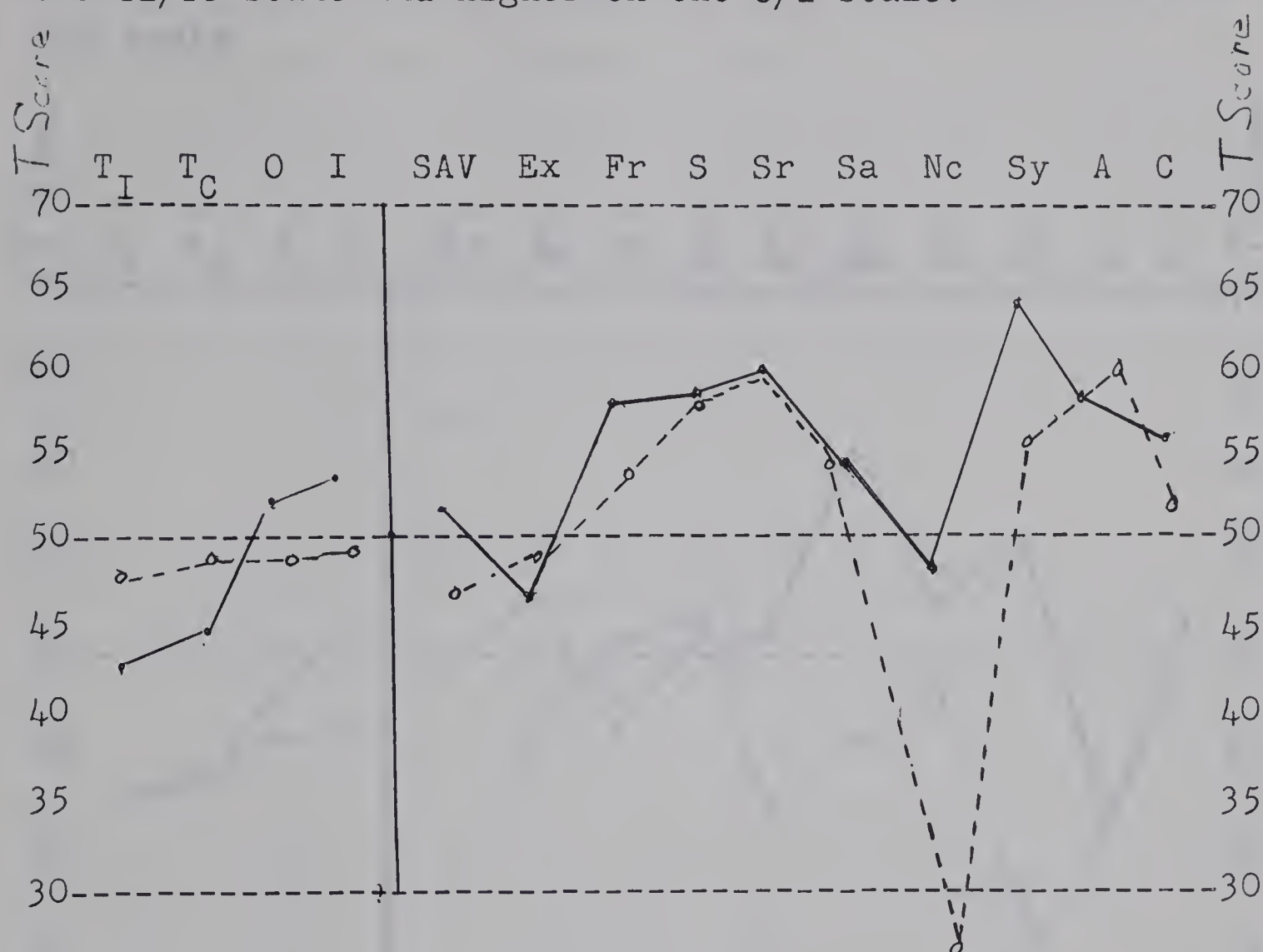


FIGURE 5

P.O.I. PROFILE OF TEACHER D - EXPERIMENTAL GROUP

The only significant change on the sub-scales is an improvement in the Nc scale.

Teacher A (Control) Figure 6 shows no change in the post test TI/TC scale. There is some improvement in the O/I scale.

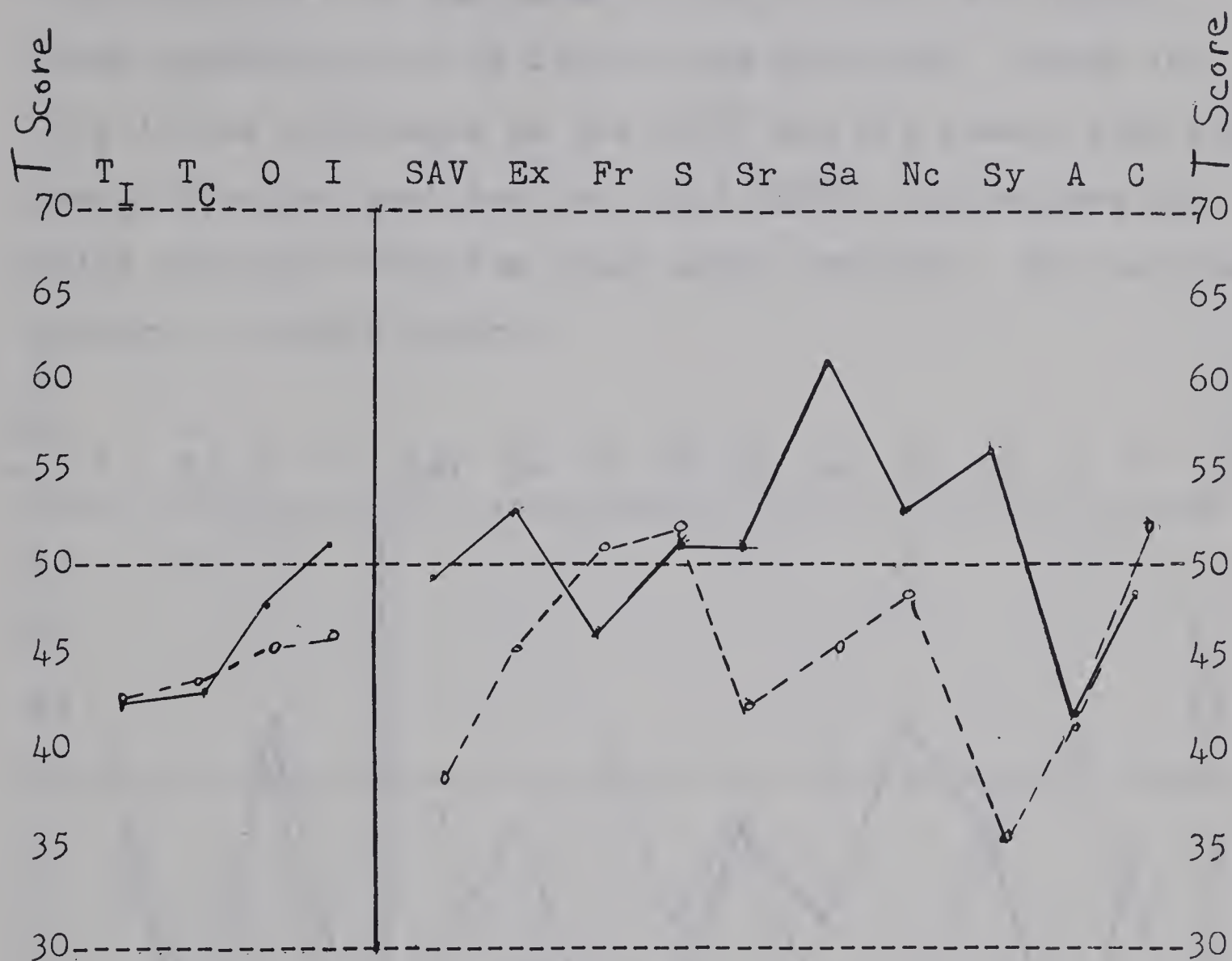


FIGURE 6

P.O.I. PROFILE OF TEACHER A - CONTROL GROUP

Sub-scale scores showing significant changes include improvement on the SAV, Sa, and Sy post test scores.

Teacher B (Control Group) Figure 7 has an unusual profile. This is likely due to the fact that he did not answer twenty-five questions on the pre test and twenty-seven questions (out of 150) on the post test. There is very little difference on the TI/TC and O/I scales from the pre to the post test and the total TI/TC, O/I pattern is quite different from the other seven profiles. The sub-scale pattern is almost random.

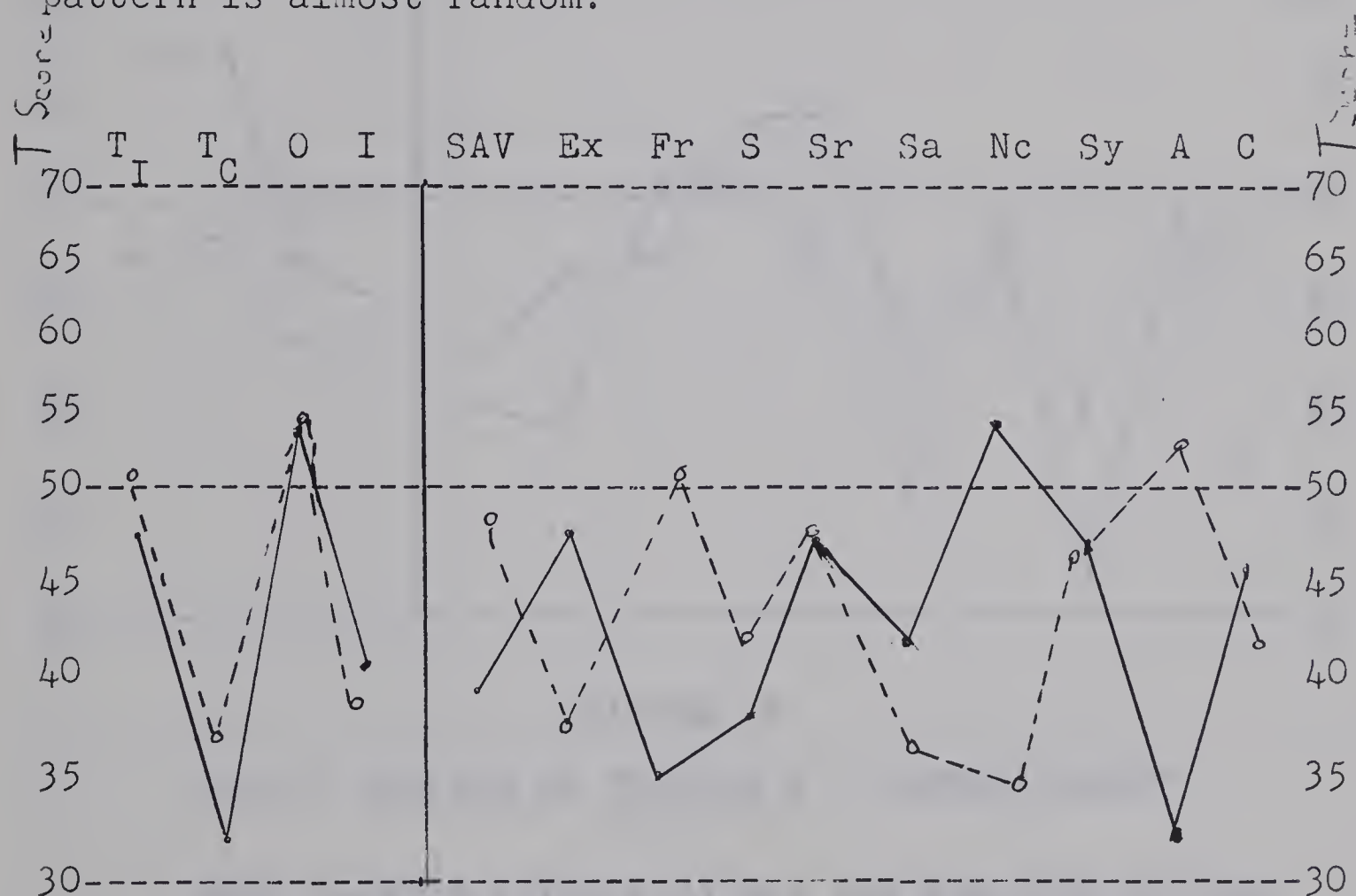


FIGURE 7

P.O.I. PROFILE OF TEACHER B - CONTROL GROUP

Interpretation of a profile based on such a low percentage of responses is meaningless (12).

Teacher C (Control Group) Figure 8 improved significantly on the TI/TC scale and showed some improvement on the O/I scale.

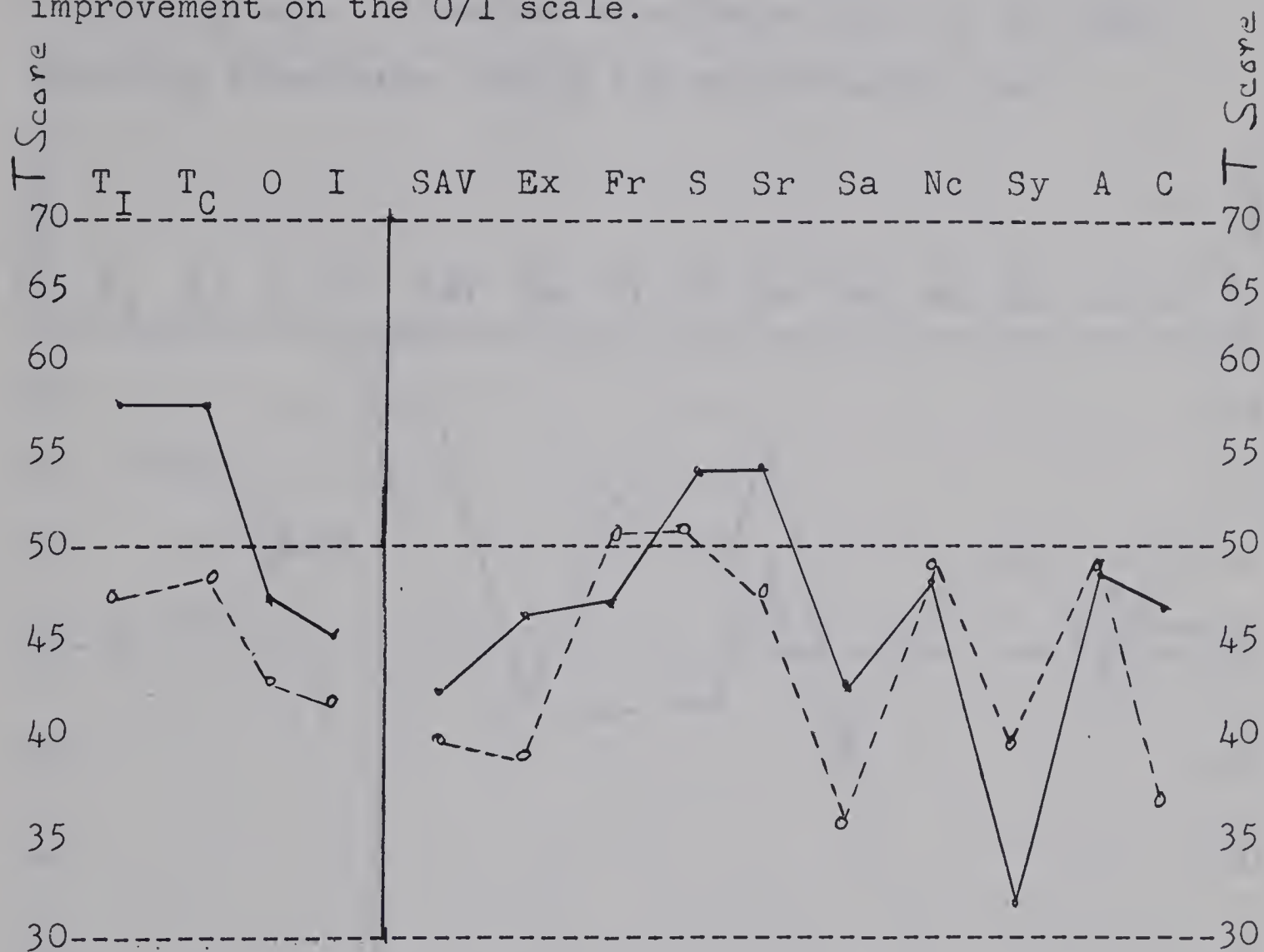


FIGURE 8

P.O.I. PROFILE OF TEACHER C - CONTROL GROUP

This profile (Figure 8) and the one that follows (Figure 9) are more like the profiles expected for a successful experimental group.

Teacher D (Control Group) Figure 8 showed more positive change than any other in the experimental or control groups. (Teacher D explains this by his Team Teaching experience during the experimental year.)

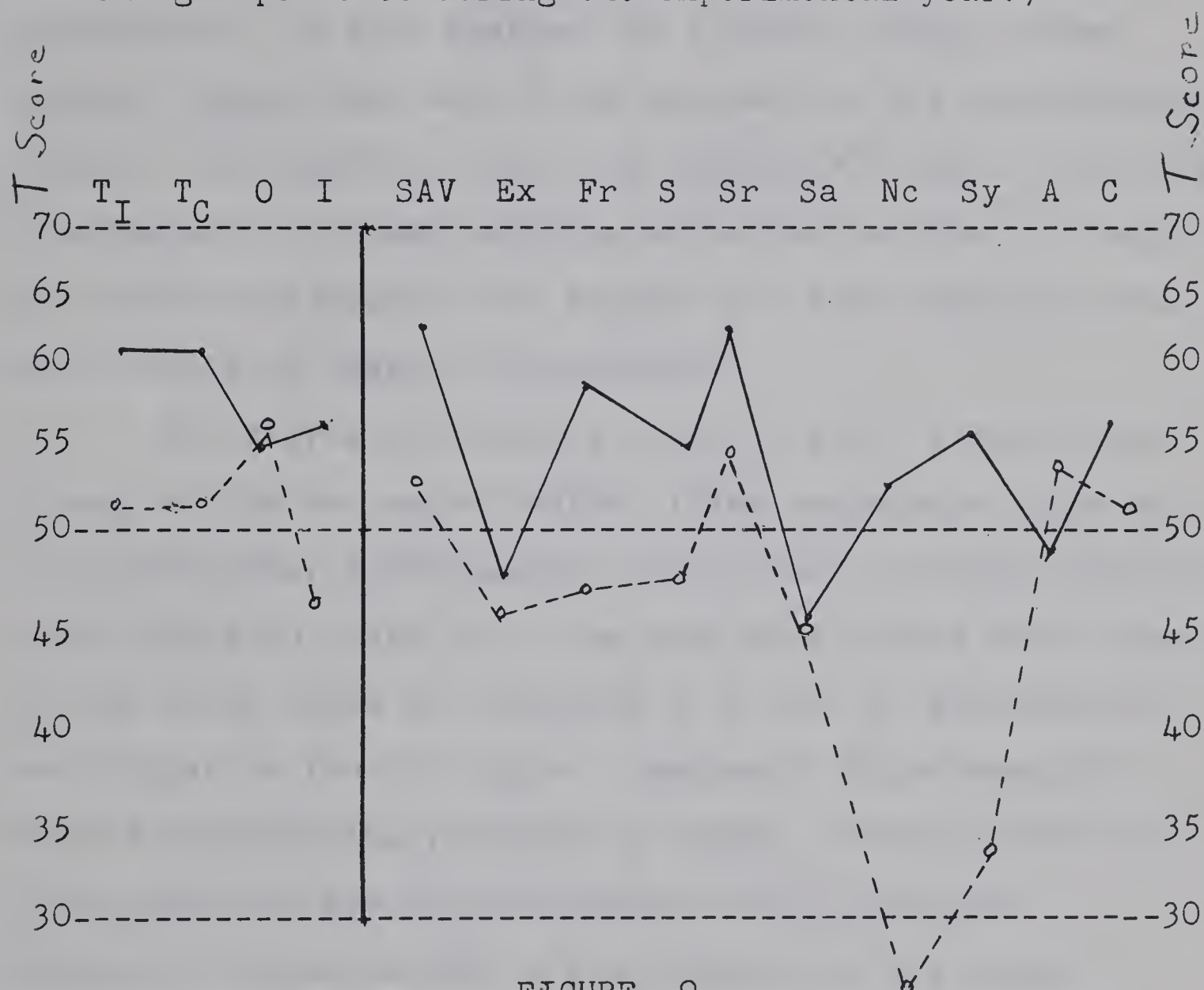


FIGURE 9

P.O.I. PROFILE OF TEACHER D - CONTROL GROUP

Significant positive changes are found in sub-scales Fr, Nc, and Sy.

SUMMARY AND DISCUSSION

The results of the pre and post tests with the Personal Orientation Inventory do not support the research hypothesis. In fact Teacher "D" (Control Group) showed greater change than any of the teachers in the experimental group. (It should be noted the Teacher "D" had a year long involvement in a team teaching situation and that a change in teacher orientation can happen in a team teaching group as a result of teacher interaction.)

The scores of Teachers A, B, C, and D (Experimental Group) on the two major scales, (Time competence scale and the Inner-other directedness scale) show a notable reversal (see Figure 10, page 33). The post test scores were lower on the TI/TC scale for Teachers A, B, and D (Experimental) and higher on the O/I scale. Teacher C (Experimental) showed the opposite reversal of scores. None of the control group teacher's scores showed such a reversal. Teacher C (Experimental) often referred to his German heritage in explanation of his more authoritarian point of view. He felt that this hampered his efforts to develop student-centered teaching techniques. It is possible that his background made necessary a greater and therefore a more difficult change in orientation.

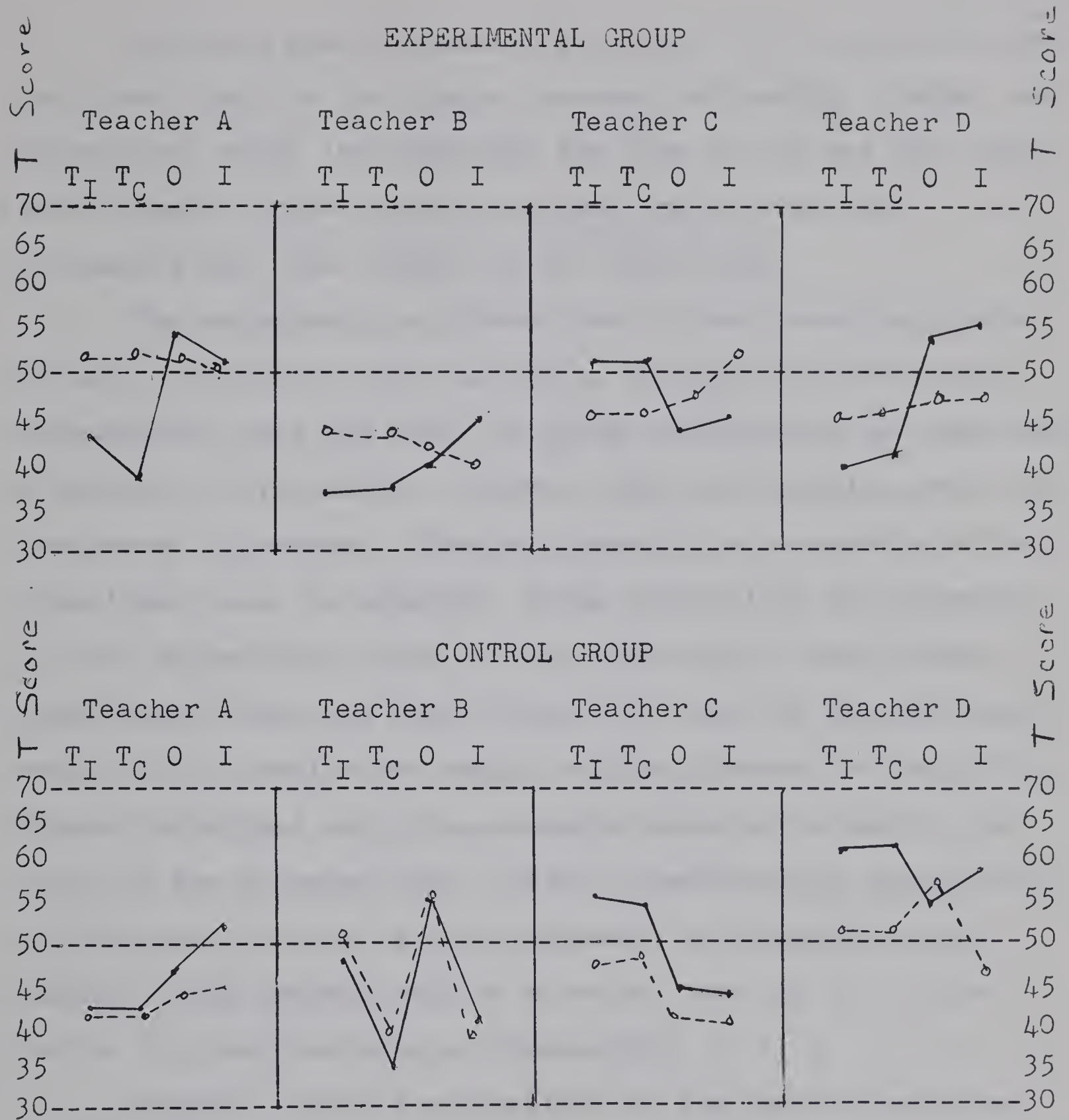


FIGURE 10

SUMMARY OF MAJOR P.O.I. SCALES FOR EXPERIMENTAL
AND CONTROL GROUPS

Legend: o---o---o Pre Test
 •---•---• Post Test

Applying Lewin's model for change (16) (in which he sets out three steps in the change process; unfreezing, change, and refreezing) might indicate that the time factor was the important element in the results obtained and allowed only unfreezing and some change but not refreezing.

The experiment as planned was to have taken two hours of tape recording in the classroom, two hours of individual consultation, and two hours of group consultation per week over a period of five months. However, many difficulties arose in the actual experiment. Teachers teaching six-sevenths of the school day, and, in addition, being responsible for extracurricular activities, found it very difficult to have enough time free at noon and after school, so that the actual experiment did not involve the amount of time planned for initially. Missed individual and group sessions amounted to nearly one third of the proposed time. This is particularly significant in the group setting as group cohesion is dependent on all members being present over an extended time and is a major factor in group learning or change (11).

Another possible explanation of the lack of positive results on the P.O.I. might be that the inventory itself is not reliable. However, follow-up research as reported in the Educational and Industrial Testing Service Bulletin (6), show that the above conclusion is probably not valid as reliable results were obtained by other experimenters using this instrument.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

It is important that future researchers understand that the change in teachers, which this experiment was designed to make possible, is compared by Lewin and Grabbe (11) as being very similar to an individual struggling to adjust to life in a different culture. This takes much time and is characterized by frustration at the beginning.

Although the experimental group members were volunteers who wanted to try such an experience, they were tempted at the beginning to withdraw because of anxiety and frustration. Later, one-hour individual sessions and two-hour group sessions were not long enough because communication of real feeling was accomplished near the end of the experimental period.

The reaction of the experimental group is reported in their own words in Appendix 2. The teachers' view of their experiences is generally a positive one.

The Principal of Eastglen High School attended three of the group sessions on the invitation of the Experimental Group. There was a noticeable change in the reaction of the teachers in the experimental group to his presence between the beginning sessions and those which

came later. There was a good deal more openness and frank discussion about problems at the end than there was at the beginning.

Under experimental situations there was also a noticeable change in the response of the class to the activities going on in the classroom, as shown by the tapes that the teachers made during their classroom teaching. In addition, the consultant had some of the students in group counseling sessions at the same time that the experiment was going on and there was a definite change in the attitude of the students toward their teachers. One particular group of boys in Physical Education 10 initially would speak directly of the teacher and what he was doing and how he was attempting to do it in a derogatory manner. This changed over the period of time to talk about Physical Education and what the students were going to do next, leaving out specific mention of the teacher.

At the conclusion of the experiment, a regular school staff meeting was held in which the experimental group made up part of the program. The teachers were given a chance to give their impressions of the experiment in which they had been involved. The feelings that they expressed were very definitely positive as to the value of the work which they had been doing.

It was noted that other teachers not involved in the experimental situation asked to talk with the consultant about their classroom problems and possible experimental attempts at overcoming them.

The Administration of Eastglen High School, after consultation with Department Heads and Teachers, has asked the Edmonton Public School Board for time and equipment to carry on further experimental work in this area in September, 1967. This will involve additional staff, more tape recorders, a video tape unit, and various library materials.

A major reason for this request is the raising of the compulsory school attendance age to sixteen years, which resulted in large numbers of poor achievers attending high school. The task of teaching these students who in past years did not attend high school and are now not interested in school, seems to require a different approach by teachers. Teachers who are unable to change their approach, find working with low-interest, low-achievement youngsters very frustrating.

RECOMMENDATIONS

The fact that Eastglen High School is going to engage in this kind of an inservice experience for teachers would indicate that further research is definitely needed

in this area.

Recommendations from this pilot study would include:

1. A large enough sample size to make possible statistical analysis of the results of the Personal Orientation Inventory. Getting enough teachers to co-operate seems to be no problem as twenty-five of twenty-six teachers asked at Eastglen School volunteered to participate in the pilot study.

2. Because much of the interaction in a classroom is missed by audio recording and because video recording systems have now decreased in price to about \$1,500.00, video recording should be used instead of audio recording.

3. An increase in time available for such an experiment is the major recommendation from the pilot study. The time must be scheduled as a part of the regular work load of those involved and should probably be for an entire school year.

4. Another possibility would be to relieve teachers of their regular duties for half the school year, have them remain on the payroll, and have them participate in such an interaction away from the negative reinforcement of the familiar school situation. To do this, two teachers could be assigned to the job of one teacher for the year, each having five months

for experimentation. (This last suggestion is supported by the research of the National Training Laboratories (15), which shows that change is more rapid when the subjects are freed from the stresses of their regular responsibilities.)

5. Team Teaching with teams of four or more teachers plus a consultant would be another way to organize the experimental situation. This recommendation is based on the experience of Teacher D (Control Group).

6. A recommendation which would improve communications in the school would be to have Department Heads and Administrators take part in an experimental situation, such as the one described in this paper, with the purpose of preparing them to become consultants and at the same time involve the teachers in their subject areas in separate groups. The Department Head would be at once a participant in a group and a consultant for his own group. The increased communication between teachers and administrators which was evidenced in the experiment might overcome one of the major problems expressed by Department Heads, that of trying to communicate with teachers about difficulties in the classroom.

The subjective results from the experimental teachers, the administrators, the consultant, and the

students, indicate that the basic ideas of this pilot project, although not supported by the objective evidence of the Personal Orientation Inventory, have merit if the limitations of this first pilot study can be overcome.

B I B L I O G R A P H Y

BIBLIOGRAPHY

GENERAL REFERENCES

1. Alberta Department of Education, Appraisal Team Report, 1966.
2. Bennis, W. G.; Schein, E. H.; Berlew, D. E.; Steele, F. I. Interpersonal Dynamics, Dorsay Press, Homewood, Illinois, 1964.
3. Powers, N. D. and Soar, R. S. Studies of Human Relations in the Teaching-Learning Process, V. Final Report: "Evaluation of Laboratory Human Relations Training for Classroom Teachers," Co-operative Research Project, No. 469, U.S. Office of Education, 1961.
4. Brown, J. A. C. The Social Psychology of Industry, Penguin Books, Ltd., Harmondsworth, Middlesex, England, 1954.
5. Downey, L. W. and Godwin, Ruth L. (Eds.) The Canadian Secondary School: an Appraisal and a Forecast. Gage and MacMillan, Toronto, Ontario, 1963.
6. Educational and Industrial Testing Service Bulletin, Volume I, No. 1, San Diego, California, September, 1965.
7. Flanders, N. A. Teacher Influence, Pupil Attitudes and Achievement. Micro Film, Co-operative Research Project, No. 397, U.S. Office of Education, 1962.
8. Gage, N. L. Handbook of Research on Teaching American Educational Research Association, Rand McNally, 1963.
9. Good, C. V. Introduction to Educational Research, Appleton-Century-Crofts, New York, 1963.

10. Harvey, L. V. "The Use of Non-Professional Auxiliary Counselors in Staffing a Counseling Service," The Journal of Counseling Psychology, Vol. 11, No. 4, 1964. (Attorney-General's Department, Canberra, Australia.)
11. Kemp, C. G. Perspectives on the Group Process. (Article by L. P. Bradford, Group Forces Affecting Learning.) Houghton Mifflin Company, Boston, 1964.
12. Shostrom, E. L. "An Inventory for the Measurement of Self-Actualization," The Journal of Educational and Psychological Measurement, Vol. XXIV, No. 2, 1964.
13. Shostrom, E. L. Personal Orientation Inventory, San Diego, California: Educational and Industrial Testing Service, 1963.
14. Smeltzer, F. M. "Flexibility in the Classroom." Unpublished Master's thesis, University of Alberta, Edmonton, 1966.
15. Snyder, Agnes. "The 'Why' of a Teacher Education Program," Adelphi New Teacher Education Program (ANTEP), Education Leadership, (Adelphi College, Garden City, Long Island.) December, 1961.
16. Travers, R. M. W. An Introduction to Educational Research. Macmillan, New York, 1964.
17. Weschler, I. R. and Schein, E. H. (Eds.) Issues In Training, National Training Laboratories, National Education Association, Washington, D.C., 1962.

STATISTICAL REFERENCES

18. Cattell, R. B. Factor Analysis. (An Introduction and Manual for the Psychological and Social Scientist). Harper Brothers, New York, 1952.
19. Edwards, A. L. Statistical Methods for the Behavioral Sciences. Holt, Rinehart, and Winston, New York, 1962.
20. Koenker, R. H. Simplified Statistics. McKnight and McKnight, Bloomington, Illinois, 1961.

A P P E N D I C E S

APPENDIX 1

MANUAL FOR THE PERSONAL ORIENTATION INVENTORY

APPENDIX 2

IMPRESSIONS OF THEIR EXPERIENCE BY THE
TEACHERS OF THE EXPERIMENTAL GROUP

MANUAL

APPENDIX 1

MANUAL

PERSONAL ORIENTATION INVENTORY

EITS

MANUAL

POI

PERSONAL ORIENTATION INVENTORY

**An Inventory for the Measurement of
Self-Actualization**

BY EVERETT L. SHOSTROM

**EDUCATIONAL AND INDUSTRIAL TESTING SERVICE
SAN DIEGO, CALIFORNIA 92107**

EITS MANUAL FOR THE

POI
PERSONAL ORIENTATION INVENTORY

BY EVERETT L. SHOSTROM

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Many persons have contributed to the research on the Personal Orientation Inventory and they are acknowledged throughout this manual where their data or research results are reported. It is in large part through such effort that this revised, greatly expanded manual has been made possible.

PART I DESCRIPTION ADMINISTRATION SCORING

THE INVENTORY

In recent years, Maslow (1954, 1962) has developed the idea of the self-actualizing person--a person who is more fully functioning and lives a more enriched life than does the average person. Such an individual is seen as developing and utilizing all of his unique capabilities, or potentialities, free of the inhibitions and emotional turmoil of those less self-actualized. Rogers' (1951, 1961) writings as well as those of the present author (Brammer and Shostrom, 1960) reflect the same idea and all of these authors suggest that such a person might be seen as the goal of the psychotherapeutic process. Many counselors and therapists have felt the need for a comprehensive measure of values and behavior seen to be of importance in the development of self-actualization.

The Personal Orientation Inventory (POI) was created to meet this need. The POI consists of 150 two-choice comparative value and behavior judgments. The items are scored twice, first for two basic scales of personal orientation, inner directed support (127 items) and time competence (23 items) and second for ten subscales each of which measures a conceptually important element of self-actualization.

POI scores for the scales and the subscales can be interpreted in the light of the norms that have been established and the personality categories they are designed to assess. Additionally, individual items can be used as heuristic devices in the counseling situation. The counselee's explanation of why he responds the way he does will often lead directly to the heart of a problem. Since the POI scales were developed around value concepts having broad personal and social relevance, the instrument may be expected to find general use in colleges, in business and industrial settings, in clinics and in counseling agencies.

In the therapeutic situation, use of the POI will typically start with an interpretation of the profiles of percentile or standard scores. Following this,

interpretation may shift to clinical insights generated in response to specific scales and to individual items. Employed in this manner the instrument provides therapist and patient with a measure of the client's level of positive mental health, thereby offering guidelines for use in treatment. Where other diagnostic instruments were developed with psychiatrically disturbed populations they provided the therapist with estimates of the client's pathology, a negative approach to the therapeutic process. The POI provides an objective delineation of the level of the client's mental health and a positive approach to the therapeutic process in the form of positive guides for growth during therapy. POI items are non-threatening to examinees. Thus the interpretation of the Inventory will often provide the point of departure for the patient-therapist relationship.

THE POI SCALES

The POI scales are described in Figure 1. The time and the support ratio scores cover two major areas important in personal development and interpersonal interaction. The support scale is designed to measure whether an individual's mode of reaction is characteristically "self" oriented or "other" oriented. Inner, or self, directed individuals are guided primarily by internalized principles and motivations while other directed persons are to a great extent influenced by their peer group or other external forces. The time scale measures the degree to which the individual lives in the present as contrasted with the past or future. The time competent person lives primarily in the present with full awareness, contact and full feeling reactivity while the time incompetent person lives primarily in the past, with guilts, regrets, and resentments, and/or in the future, with idealized goals, plans, expectations, predictions and fears. Since both of these scales are viewed as being clinically interpretable in relative or proportional terms, the scores for the support and time scales are each presented as ratio scores. Scores on each of the ten subscales are intended to reflect a facet important in the development of self-actualization.

Number of Items	Scale Number	Symbol	Description	Number of Items	Scale Number	Symbol	Description
I. Ratio Scores				26	10	Sa	SELF ACCEPTANCE
23	1/2	T_I/T_C	TIME RATIO Time Incompetence/ Time Competence - measures degree to which one is "present" oriented				Measures affirmation or acceptance of self in spite of weaknesses or deficiencies
127	3/4	O/I	SUPPORT RATIO Other/Inner - measures whether reactivity ori- entation is basically to- ward others or self	16	11	Nc	NATURE OF MAN
							Measures degree of the constructive view of the nature of man, mascu- linity, femininity
II. Sub-Scales				9	12	Sy	SYNERGY
26	5	SAV	SELF-ACTUALIZING VALUE Measures affirmation of a primary value of self-actualizing people				Measures ability to be synergistic, to trans- cend dichotomies
32	6	Ex	EXISTENTIALITY Measures ability to situationally or existen- tially react without rigid adherence to principles	25	13	A	ACCEPTANCE OF AGGRESSION
							Measures ability to ac- cept one's natural ag- gressiveness as opposed to defensiveness, denial, and repression of aggression
23	7	Fr	FEELING REACTIVITY Measures sensitivity of responsiveness to one's own needs and feelings				
18	8	S	SPONTANEITY Measures freedom to react spontaneously or to be oneself	28	14	C	CAPACITY FOR IN- TIMATE CONTACT
							Measures ability to de- velop contactful intimate relationships with other human beings, unen- cumbered by expecta- tions and obligations
16	9	Sr	SELF REGARD Measures affirmation of self because of worth or strength				

Figure 1. Scoring Categories for the Personal Orientation Inventory.

ADMINISTRATION

The POI is essentially self-administering. The items are printed in a reusable test booklet and the examinee records his answers on one of two specially designed answer sheets: (1) the standard POI answer sheet for hand scoring only or (2) the machine-scoring answer sheet for scoring by the IBM 1230 optical scanner. The examinee should be instructed to print his name and the additional information called for on the answer sheet. The examinee may then be asked to read the directions on the front cover of the Inventory booklet by himself or the examiner may read them aloud while the examinees read silently. Any questions the examinee may have should then be answered. There is no time limit for the Inventory. It may be completed in as little as 20 minutes. Some examinees may wish to take more time, giving considerable thought to their choices. Testing time is usually about 30 minutes.

The examiner may answer questions regarding definition of words. Questions dealing with concepts or interpretation of test items should usually be responded to by encouraging the examinee to use his own judgment in choosing the most appropriate alternative. If an item seems to be particularly troublesome, the examinee may leave it blank. This should not be encouraged. Where possible the examinee should be encouraged to go back and try again to answer items he omitted the first time through.

The Inventory has been used with early high school age subjects, extending down to the 13 year old level, without any apparent, unusual difficulties in interpreting the items. It has also been administered to groups with less than high school education. Until more evidence is available it is advisable to question the results from individuals with mental ages of less than 14.

Since the Inventory is for the most part self-administering, it may be completed in group sessions, individually while a counselee is waiting for an interview, or even on a take home basis with certain samples.

SCORING

Directions for machine scoring the IBM 1230 answer sheets are included with the machine scoring keys. To hand score the standard answer sheet, each marked sheet should first be inspected. A horizontal line should be drawn through both columns of any items where the examinee made no mark in either column (no answer) or where he marked both columns

(multiple answers). The items so cross-marked should be counted and the number entered on line (0) on the answer sheet. Where more than 10 items have been cross-marked, it is desirable whenever possible to return the Inventory to the examinee asking him to try to choose one alternative for all the items. A general rule to follow is that Inventories having more than 15 items so marked should be considered to be invalid.

Either form of POI answer sheet may be scored by hand and when scored in this way is a straightforward clerical task. The raw score for each scale can be obtained by placing a scoring template over the answer sheet and counting the number of blackened areas showing through the holes in the key.

To obtain the T_I score, use the key marked T_I (key #1). Place the key over the answer sheet and count the number of blackened marks appearing in the holes of the key. Do not count marks which have a cross-line through them. Enter the total number on the answer sheet on line (1) marked " T_I ."

To obtain the T_C score, use the key marked T_C (key #2). Place the key over the answer sheet and count the number of blackened marks appearing in the holes, as was done with the T_I key. Enter this number on line (2) marked " T_C ."

Follow the same procedure as above to obtain the O score, using the O key (key #3). Enter the raw score on line (3). Obtain the I score (key #4) and enter the raw score on line (4).

Add the four scores and the number of unanswered or double answered items on line (0) and enter the sum on the line marked Ck (check). If the first four scales have been correctly scored, the total of these four scores, plus line (0) must be 150.

The raw scores for each of the other ten subscales are obtained in the same manner by placing the appropriate key on the answer sheet, and counting the marks that appear. (Remember to not count cross-lines.) Each total is then entered on the corresponding line on the answer sheet.

When a quick estimate is desired of the examinees level of self-actualization, the Time Competence (T_C) and Inner Directed (I) scales only may be scored. Also, for correlational or other statistical analyses it is recommended that scores from the Time Competence scale and the Inner Directed scale be used in preference to the ratio scores, due to the statistical complexities of ratio scores.

PLOTTING THE PROFILE

The Profile Sheet available for the POI was constructed from adult norms. When raw scores are plotted they can automatically be converted into standard scores. For example, by reading over to the vertical column marked "Standard Scores" the standard score equivalent of a raw score of 15 on the Time Competence scale is seen to be approximately 41. The mean standard score for each scale is 50, with a standard deviation of 10. Thus about 95 percent of the population will theoretically fall between standard scores of 30 and 70 on any given scale.

SCALE SCORES

To plot the individual profile, mark a dot or circle the score where it appears on each scale of the Profile Sheet (see Figure 2). Connect these marks with straight lines. The corresponding standard scores (T scores) are printed in the extreme right and left columns of the profile form.

RATIO SCORES

Ratio scores are entered in the blank spaces located at the top center of the Profile Sheet under the headings, "Time Ratio" and "Support Ratio". The bars to the right of these spaces can be shaded in to show this ratio in graphic form. The ratio scores have the threefold advantage of providing a check on the scoring, correcting for unanswered items and yielding scores which are more closely related to the conceptual framework underlying the development of the Inventory.

The Time Ratio score is obtained by using the numbers from lines (1) and (2) on the answer sheet as a ratio. This ratio should be reduced by dividing the numerator (1) and the denominator (2) each by the numerator value. The resulting ratio will be one over a number which is usually larger than one. For example, the raw score (T_I) 3 and (T_C) 20 reduces to a ratio of 1 : 6.7 for the Time Ratio by dividing 3 by 3 and 20 by 3. The denominator value (6.7 in the example) is recorded on the Profile by shading up to 6.7 in the bar representing the denominator.¹

The Support Ratio is determined in the same way as the Time Ratio, using the numbers from lines (3) and (4). For example, the raw scores (O) 42 and (I) 84 would be reduced to a ratio of 1 : 2.0 for the Support Ratio by dividing 42 by 42 and 84 by 42. This number (2.0 in the example) would be indicated on the Profile by shading in the denominator bar up to 2.0.

To further assist in interpreting the Inventory results, short descriptions of each scale appear at each pole on the Profile and a brief, general description of what the POI measures is given on the reverse side of the Profile Sheet.

NORMS

Norms for the Personal Orientation Inventory are presented for college students and for selected occupational and clinical groups. The college student norms are given in percentiles. The occupational and clinical group norms are presented as means and standard deviations and plotted group profiles.

PERCENTILE NORMS

Percentile scores for college freshman are based on a sample of 2,607 entering college freshman at Western and Midwestern liberal arts colleges. There are 1,514 males and 1,093 females. These data are presented in Table 1.

SEX DIFFERENCES

Means, standard deviations and tests of significance of difference between a male and a female sample of incoming freshmen at a large Midwestern college are presented in Table 2. In that sample a significant difference at the .01 confidence level was obtained on the Time Competence scale with a raw score difference of 1.1 points. A similar difference was obtained for Time Competence in a sample of 561 college freshman in a representative liberal arts college in southern California. In that sample the obtained raw score difference of .66 on the Time Competence scale was significant at the .01 level. Other significant differences presented in Table 2 are for Existentiality (Ex), Self-acceptance (Sa), Nature of man (Nc) and Synergy (Sy). In these instances the female college sample mean was higher than the male sample. With the exception of the Time Competence scale all mean differences were less than one raw score point and thus may be of little practical significance for individual interpretation. Further, Fox (1965b) in reporting on a sample of 100 (50 male and 50 female) adult hospitalized psychiatric patients found no significant sex differences on any of the POI scales.

REFERENCE GROUP PROFILES

Norms in the form of plotted profiles are presented in Figure 3 for representative occupational and clinical groups. A quick appraisal of a particular profile may be made by visually comparing it with the corresponding reference group. For more precise comparisons and for research purposes the scale means and standard deviations for each reference group are presented below the profile.

¹ The computational procedure for obtaining the denominator of the Time Ratio to be recorded on the Profile Sheet is to divide T_C (Key 2) by T_I (Key 1) and record this number in the blank.

² The computational procedure for obtaining the denominator of the Support Ratio to be recorded on the Profile Sheet is to divide I (Key 4) by O (Key 3) and record this number in the blank.

Table 1

Percentile Scores Based on 2,607 Entering College Freshmen

Raw Score	Raw Score	Percentiles I Scale	Percentiles T _C Scale	Percentiles Sub-Scales										Raw Score																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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PROFILE SHEET FOR THE PERSONAL ORIENTATION INVENTORY

NAME _____ DATE TESTED _____

AGE _____ SEX _____

OCCUPATION _____

I $T_I - T_C$ (Time) Ratio:
Self-Actualizing Average: $T_I : T_C = 1 : 8$
Your Ratio: $T_I : T_C = 1 : \underline{\hspace{1cm}}$

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

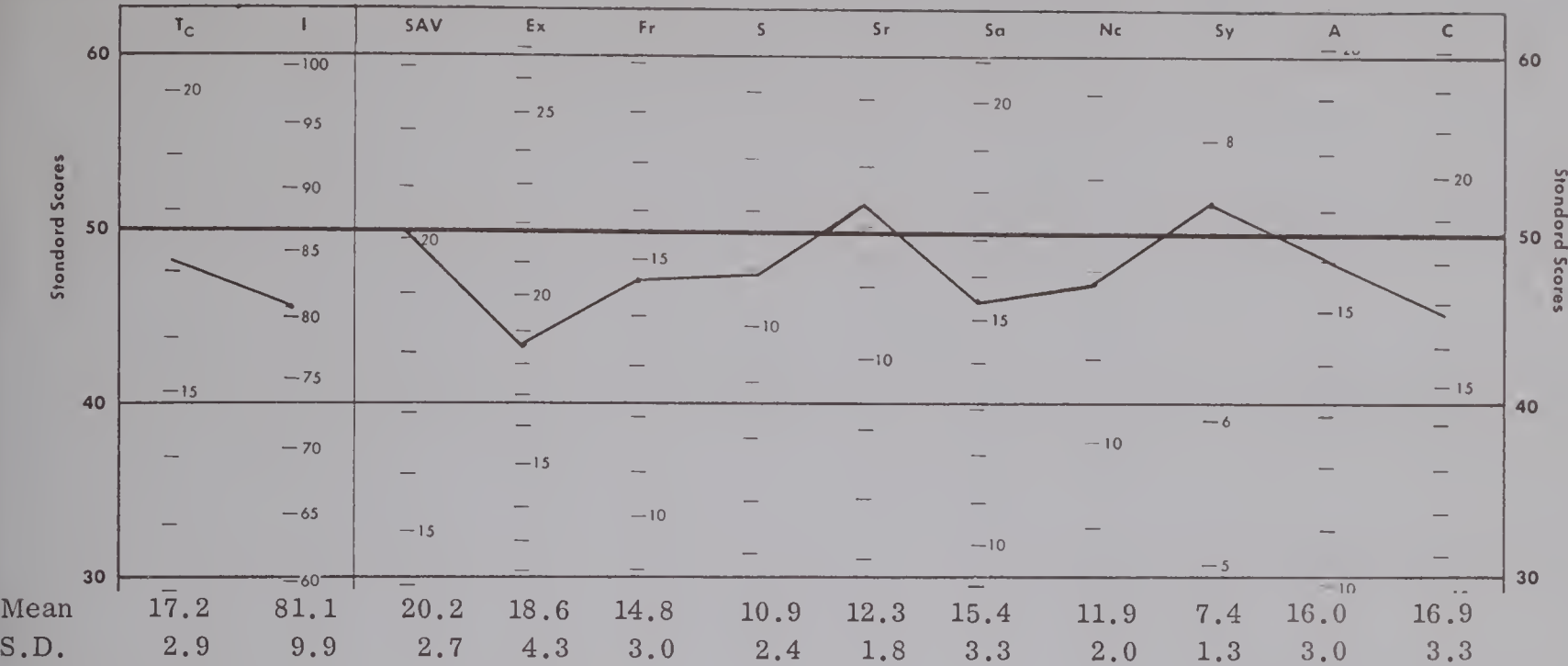
II $O - I$ (Support) Ratio:
Self-Actualizing Average: $O : I = 1 : 3$
Your Ratio: $O : I = 1 : \underline{\hspace{1cm}}$

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

TIME COMPETENT Lives in the present	INNER- DIRECTED Independent, self- supportive	VALUING		FEELING		SELF-PERCEPTION		SYNERGISTIC	AWARENESS	INTERPERSONAL SENSITIVITY	
		SELF- ACTUALIZING VALUE Holds values of self- actualizing people	EXISTENTI- ALITY Flexible in application of values	FEELING REACTIVITY Sensitive to own needs and feelings	SPONTA- NEITY Freely expresses feelings behaviorally	SELF-REGARD Has high self-worth	SELF- ACCEPTANCE Accepting of self in spite of weaknesses	NATURE OF MAN, CON- STRUCTIVE Sees man as essentially good	SYNERGY Sees oppo- sites of life as meaning- fully related	ACCEPTANCE OF AGGRESSION Accepts feelings of anger or aggression	CAPACITY FOR INTIMATE CONTACT Has warm interpersonal relationships
T_C	I	SAV	Ex	Fr	S	Sr	Sa	Nc	Sy	A	C
ADULT NORMS											
80	-125									-25	
	-120										
	-115										
70	-110	-25	-30								
	-105			-20	-15	-15		-15	-9		-25
										-20	
60	-100										
	-95		-25				-20		-8		
	-90										-20
50	-85	-20		-15					-7		
	-80		-20		-10		-15			-15	
	-75					-10					-15
40	-70		-15					-10	-6		
	-65	-15		-10			-10				
									-5		
30	-60				-5					-10	-10
	-55		-10								
	-50					-5			-4		
20	-45			-5			-5				
		-10	-5								-5
									-3		
TIME INCOMPE- TENT Lives in the past or future	OTHER DIRECTED Dependent, seeks sup- port of others' views	Rejects values of self-actualiz- ing people	Rigid in application of values	Insensitive to own needs and feelings	Fearful of expressing feelings behaviorally	Has low self-worth	Unable to accept self with weaknesses	Sees man as essentially evil	Sees opposites of life as antagonistic	Denies feelings of anger or aggression	Has diffi- culty with warm inter- personal relations

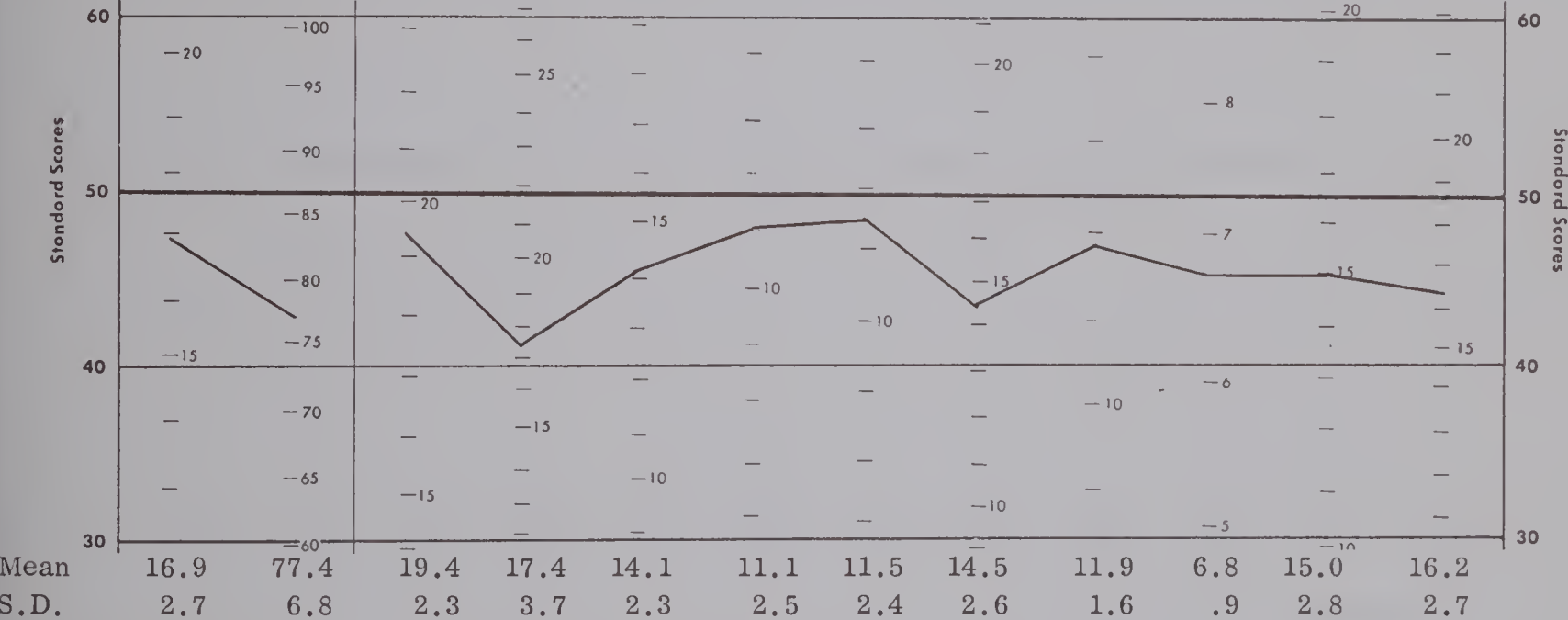
Figure 2. Profile Sheet for the Personal Orientation Inventory.

SUPERVISORS (Male: large electronics company) (N = 66) *



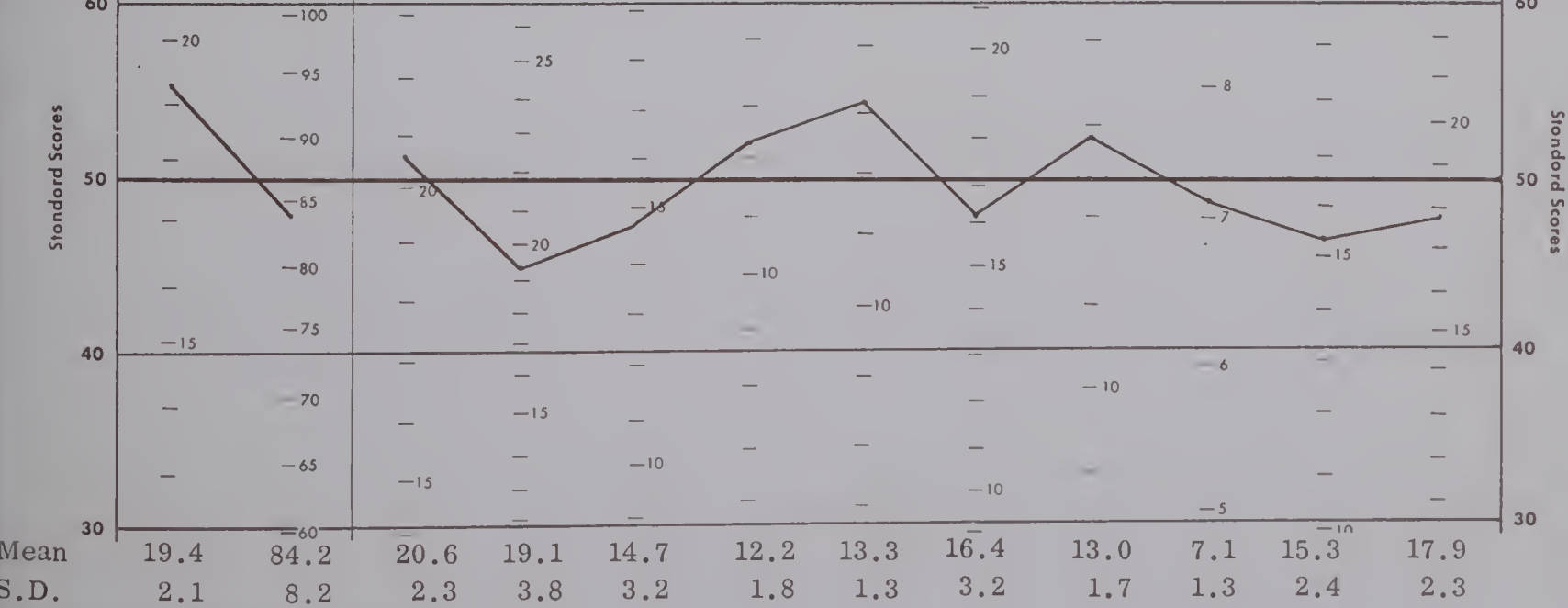
*From data reported by William M. Swartley.

STUDENT NURSES (Beginning training) (N = 64) *



*From data reported by W. Theodore May and Robert Ilardi.

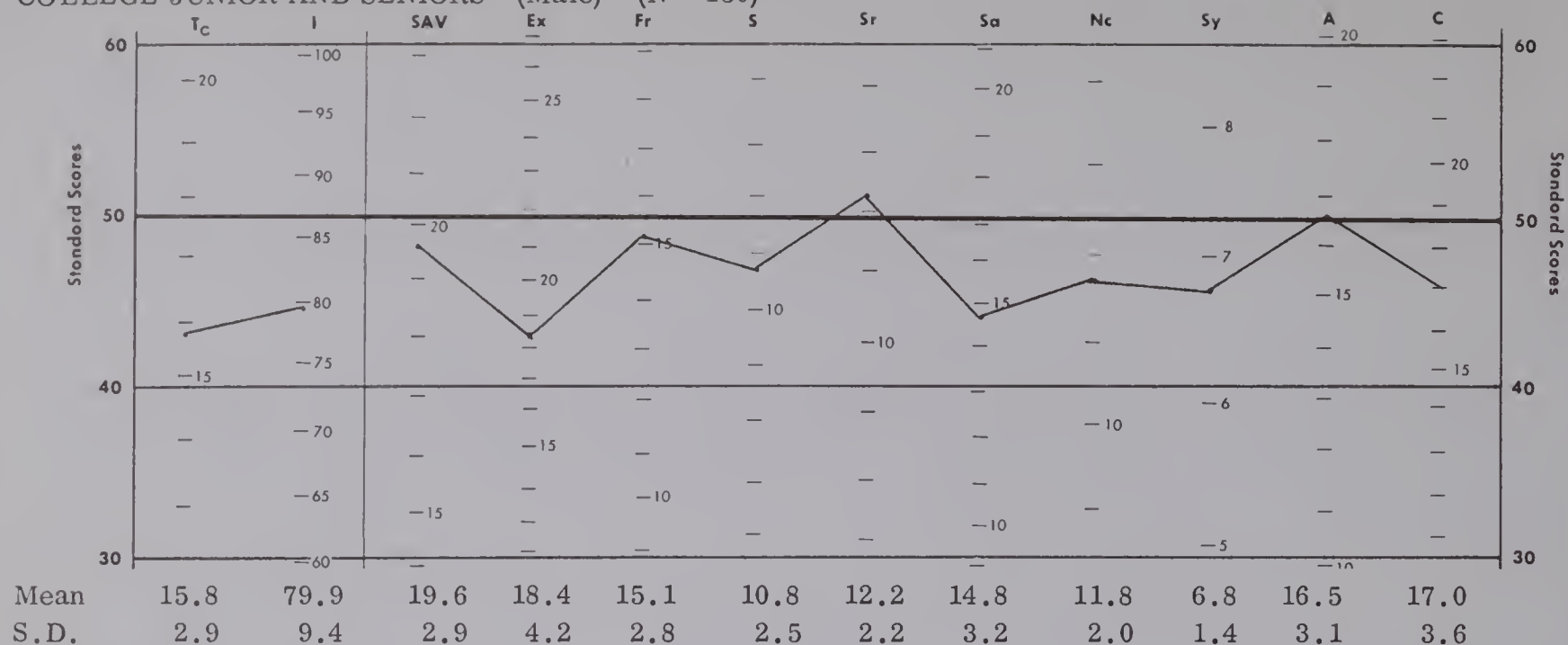
SERVICE ORGANIZATION VOLUNTEERS (Peace Corps) (N = 62) *



*From data reported by Peter S. Fernald.

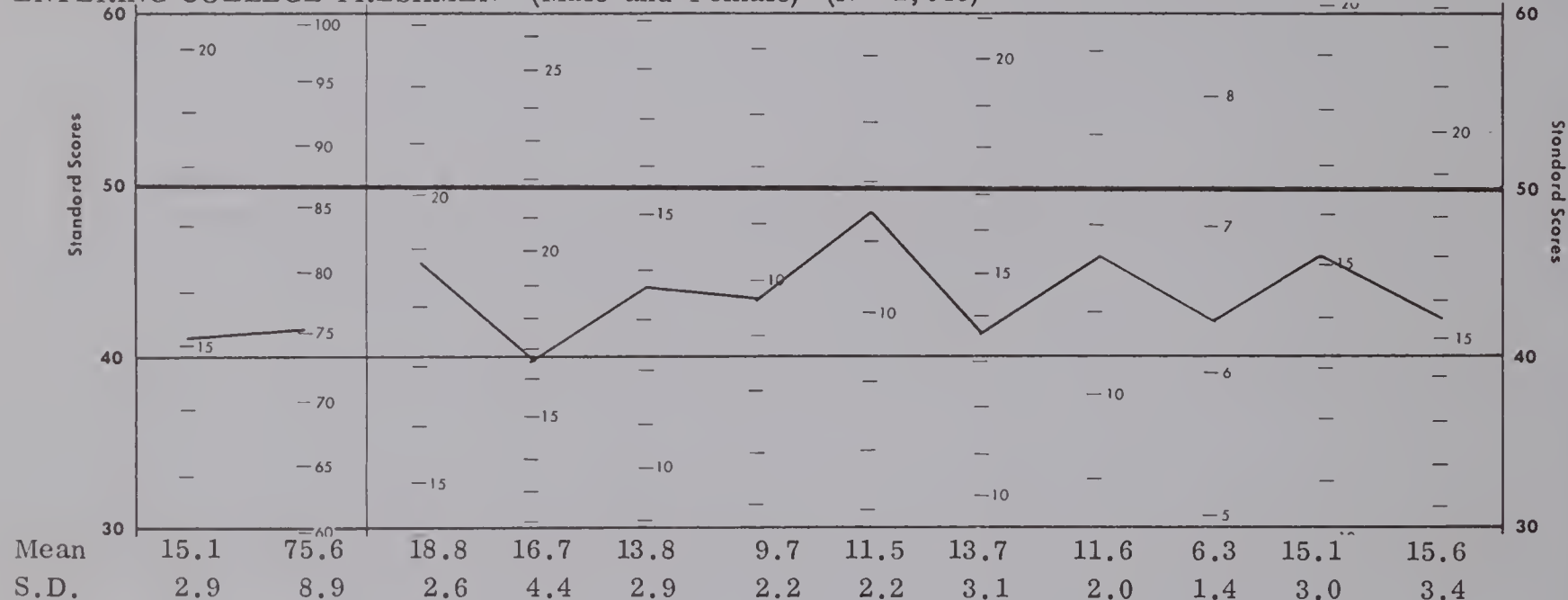
Figure 3. POI Profiles for Selected Reference Groups

COLLEGE JUNIOR AND SENIORS (Male) (N = 150) *



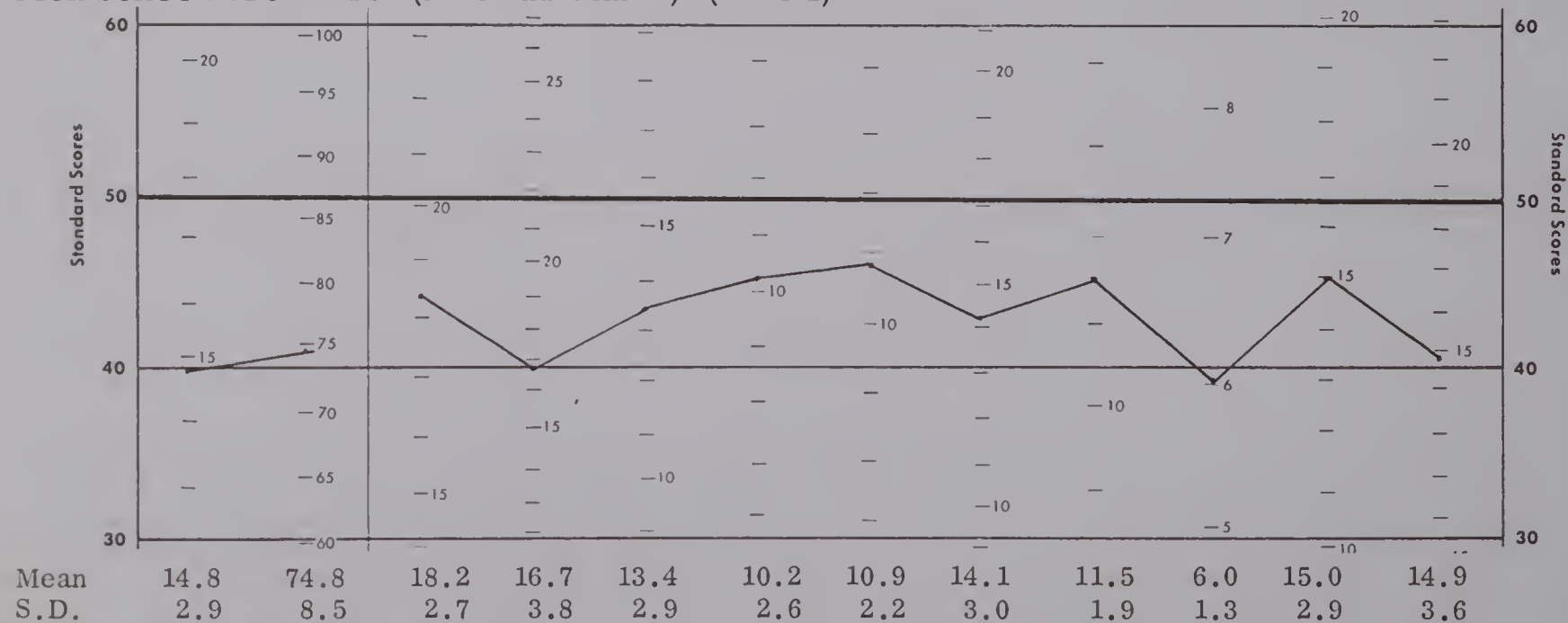
*From data reported by Robert J. Lee.

ENTERING COLLEGE FRESHMEN (Male and Female) (N = 2,046) *



*From data reported by Daryl D. Jenkins.

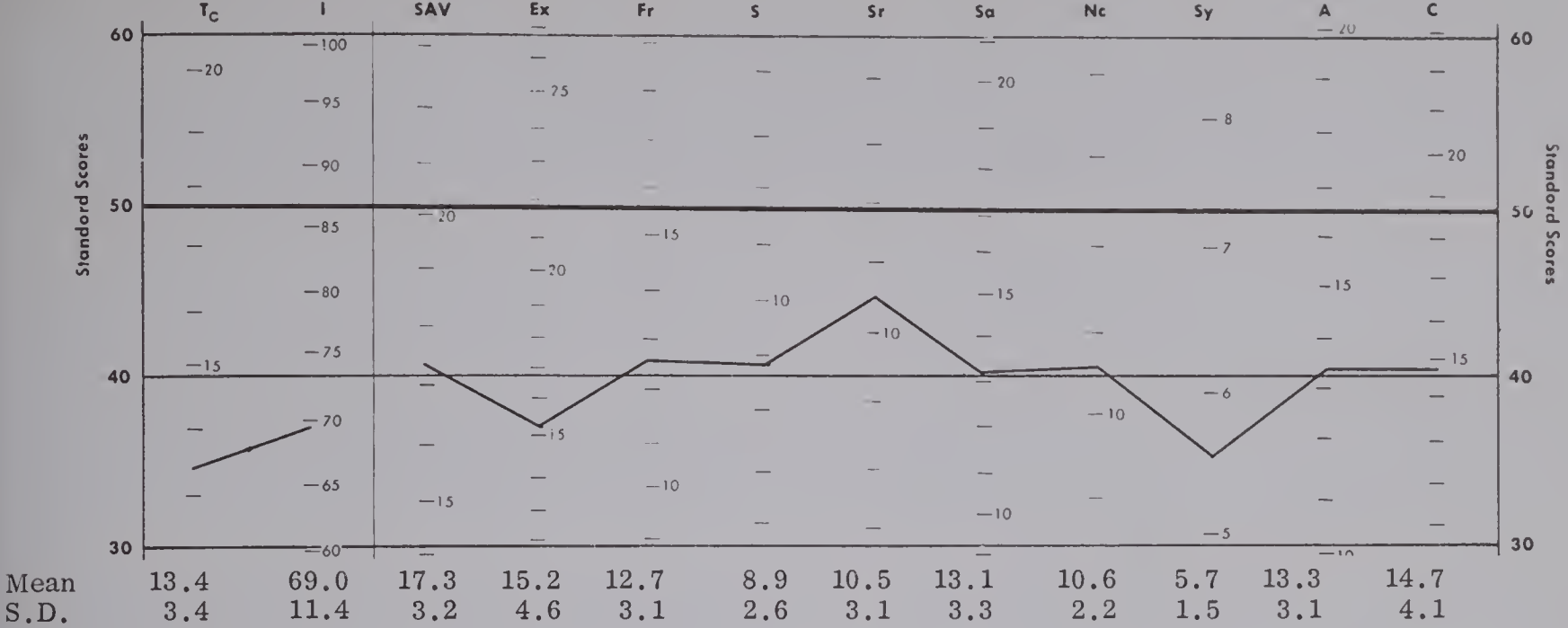
HIGH SCHOOL STUDENTS (Male and Female) (N = 412) *



*From data reported by William R. Weir.

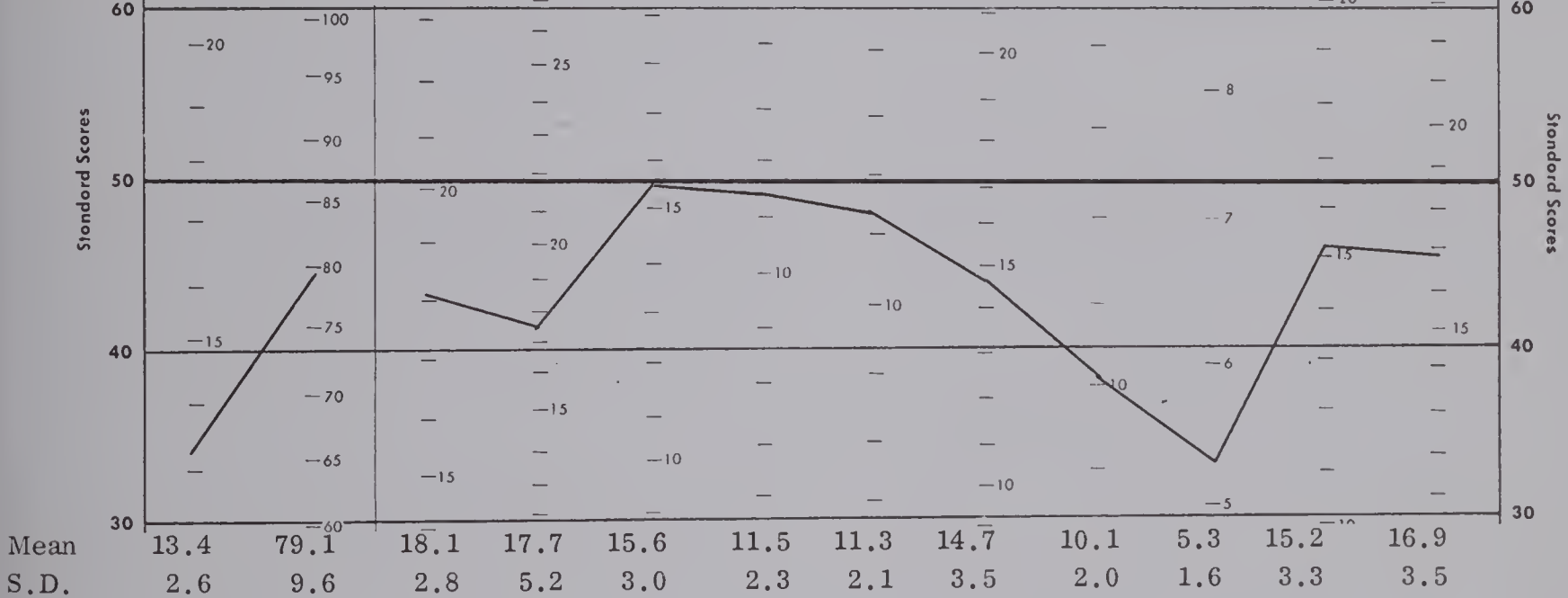
Figure 3. POI Profiles for Selected Reference Groups (cont.).

HOSPITALIZED PSYCHIATRIC PATIENTS (Male and Female) (N = 185) *



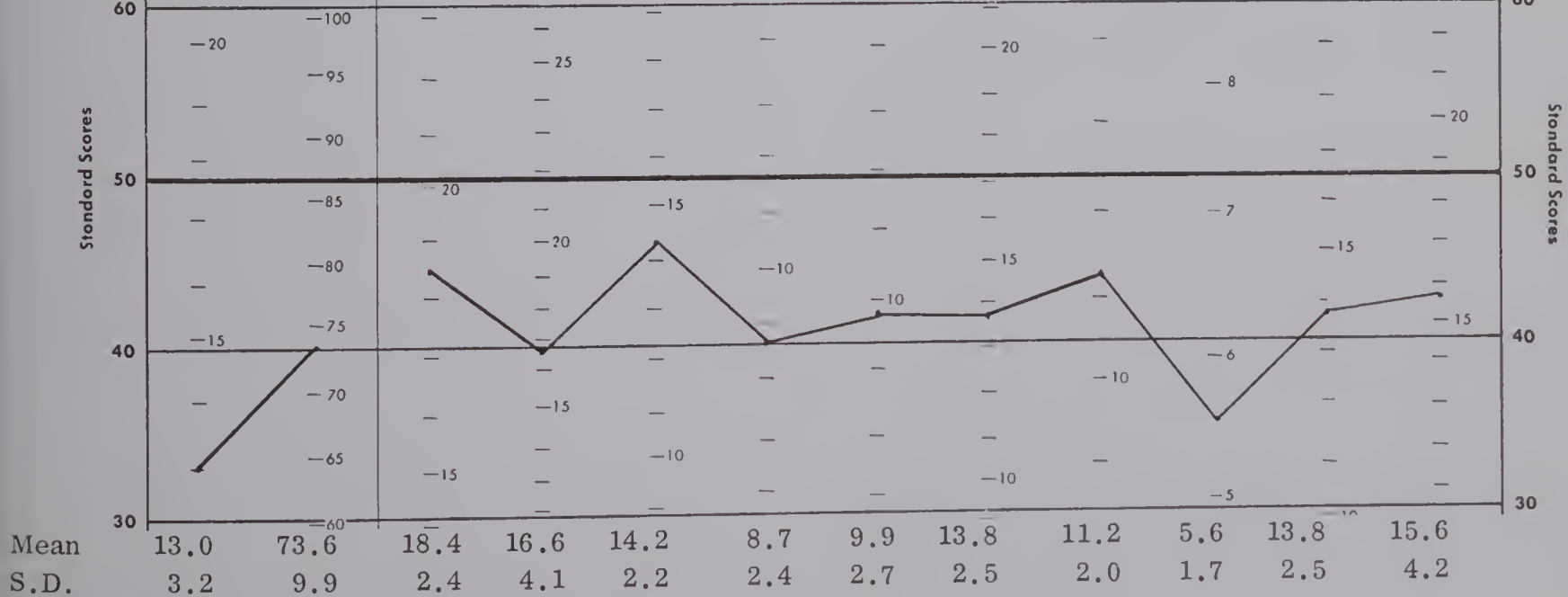
*From data reported by Jack Fox.

DELINQUENT MALES (Navy Brig) (N = 84) *



*From data reported by Robert R. Knapp.

ALCOHOLIC MALES (N = 20) *



*From data reported by Joseph S. Zaccaria and William R. Weir.

Figure 3. POI Profiles for Selected Reference Groups (cont.).

Table 2

Means, Standard Deviations and Significance of Differences Between a Male and
a Female Sample of Entering College Freshmen¹

Scales	Male (N = 1,254)		Female (N = 792)		Mean Difference
	Mean	S. D.	Mean	S. D.	
Time Competent	15.1	2.9	16.2	2.7	-1.1*
Inner Directed	75.6	8.9	76.0	9.7	- .4
Self-Actualizing Value	18.8	2.6	19.1	3.4	- .3
Existentiality	16.7	4.4	17.2	4.2	- .5*
Feeling Reactivity	13.8	2.9	13.7	2.8	.1
Spontaneity	9.7	2.2	9.6	2.4	.1
Self-Regard	11.5	2.2	11.5	2.3	.0
Self-Acceptance	13.7	3.1	14.3	2.8	- .6*
Nature of Man, Constructive	11.6	2.0	11.9	1.9	- .3*
Synergy	6.3	1.4	6.6	1.3	- .3*
Acceptance of Aggression	15.1	3.0	15.0	2.9	.1
Capacity for Intimate Contact	15.6	3.4	15.6	3.3	.0
1. Based on data reported by Daryl D. Jenkins. *Significant at the .01 confidence level.					

PART II INTERPRETATION

It is assumed that the interpretation of the POI will be undertaken only by professionals who are adequately trained in the basic concepts of measurement as well as in the specifics of POI interpretation. It should also be noted that while the POI results are intended to be interpreted to the counselee they should be considered confidential and should never be made public.

Interpretation of the POI may be accomplished on an individual basis or the meaning of profile patterns may be presented in group sessions. Both methods have been successfully employed. The POI was designed to maximize the interpretability and ease with which the meaning of these concepts and value orientations may be conveyed to the counselee.

The following sequence of interpretation is merely suggested as a convenient way of gaining experience with the POI. The user will develop his own style as he becomes familiar with the instrument. The first focus of interest will probably be in the overall level of self-actualization of the person being tested and secondly, in the scores on particular scales.

After plotting the profile, note the overall profile elevation. If the Time Competence and Inner-Directed Scores or most of the scale scores fall above the mean standard score line based on the normal adult sample the probability is that the person is one who is functioning relatively effectively and is comparatively competent in his development toward self-actualization. If most scores are below this mean, it may be that the individual is experiencing difficulty in his personal effectiveness and that changes in his value orientations would be beneficial in assisting him to experience further personal development toward self-actualization. The profiles plotted in Figures 3 and 9 for specific criterion groups of non-self-actualized people illustrate characteristic profile patterns of these less fully functioning individuals.

INTERPRETING RATIO SCORES

The next focus of attention should be on the interpretation of the Time and the Support Ratio scores, the Support Ratio score is expressed as a ratio of other orientation to inner orientation. The Time Ratio is the ratio of Time Incompetence to Time Competence.

Time Competence and direction of support are each best understood in relative terms. A person does not always react in a given way as reflected by a particular score. Sometimes he is inner-directed and sometimes he is other-directed, but his balance (or ratio) of other to inner direction scores reflects his characteristic or predominant mode of reacting; similarly with the Time Ratio.

A brief general description of what the POI measures is presented on the back of the Profile Sheet. Short definitions of the ratios and scales are presented on the Profile Sheet itself. Amplifications of these descriptions follow.

TIME RATIO

The self-actualized person is primarily Time Competent and thus appears to live more fully in the here-and-now. He is able to tie the past and the future to the present in meaningful continuity. He appears to be less burdened by guilts, regrets, and resentments from the past than is the non-self-actualized person, and his aspirations are tied meaningfully to present working goals. He has faith in the future without rigid or over-idealistic goals. Figure 4 compares the self-actualized, normal, and non-self-actualized groups on the Time dimension. The self-actualized individuals past and future orientations are depicted as reflecting positive mental health to the extent that his past is used for reflective thought and the future is tied to present goals. His use of time in a competent way is expressed in a Time Ratio score of approximately 1:8, as compared to the non-self-actualized Time Ratio of about 1:3.

The ratio score is utilized to show that there is still some imperfection in the use of time on the part of a self-actualized person. He is, to a degree, Time Incompetent. It may also be helpful to view this ratio as an expression of use, contrasted with the misuse, of time. Thus, a self-actualized person might be thought of as being "incompetent" in his use of a comparatively small portion of his time. With a ratio of 1:8 he may be said to be time incompetent one hour for every eight hours that he is time competent, or 1/9 of his time. The normal is thought of as being time incompetent 1/6 of the time, with a ratio of approximately 1:5.

The non-self-actualized is comparatively the most time incompetent. With a ratio of 1:3 he is time

incompetent about 1/4 of the time. This marked time incompetence suggests that the non-self-actualized person does not discriminate well between past or future. He is excessively concerned with the past or the future relative to the present. He may be disoriented in the present, as shown in Figure 4, by splitting off his past or future. A person who is Past-oriented may be characterized by guilt, regret, remorse, blaming and resentments. He is a person who is still nibbling on the undigested memories and hurts of the past. This would be represented by Time Incompetent scored choices for items 48, 82, 76, 112, 125, 136 and 142 in the POI.

A person who is Future-oriented is an individual who lives with idealized goals, plans, expectations, predictions and fears. He is the obsessive worrier who nibbles at the future. This orientation is represented in POI Time Incompetence items 59, 88, 90, 104, 105, 110, 140 and 145.

A person who is a Present-oriented person is the individual whose past does not contribute to the present in a meaningful way and who has no future goals tied to present activity. He is a person who engages in meaningless activity and unreflective concentration. He is the busy-body who is always actively avoiding facing himself. This is represented in POI Time Incompetent items 102, 111, 124, 143 and 144.

Figure 5 shows sample Time Ratio scores and their grouping according to the conception of self-actualization.

Raw Scores			
T_I/T_C			
1 : 22		1 : 22.0	
2 : 21	Self-actualized Range	1 : 10.5	{ Self-actualized, 1 : 7.7
3 : 20		1 : 6.7	
4 : 19	Normal Range	1 : 4.8	{ Normal, 1 : 5.1
5 : 18		1 : 3.6	
6 : 17	Non-self-actualized Range	1 : 2.8	{ Non-self-actualized, 1 : 2.9
7 : 16		1 : 2.3	
8 : 15		1 : 1.9	
9 : 14		1 : 1.6	
10 : 13		1 : 1.3	
11 : 12		1 : 1.1	

Figure 5. Sample Time Ratio Scores.

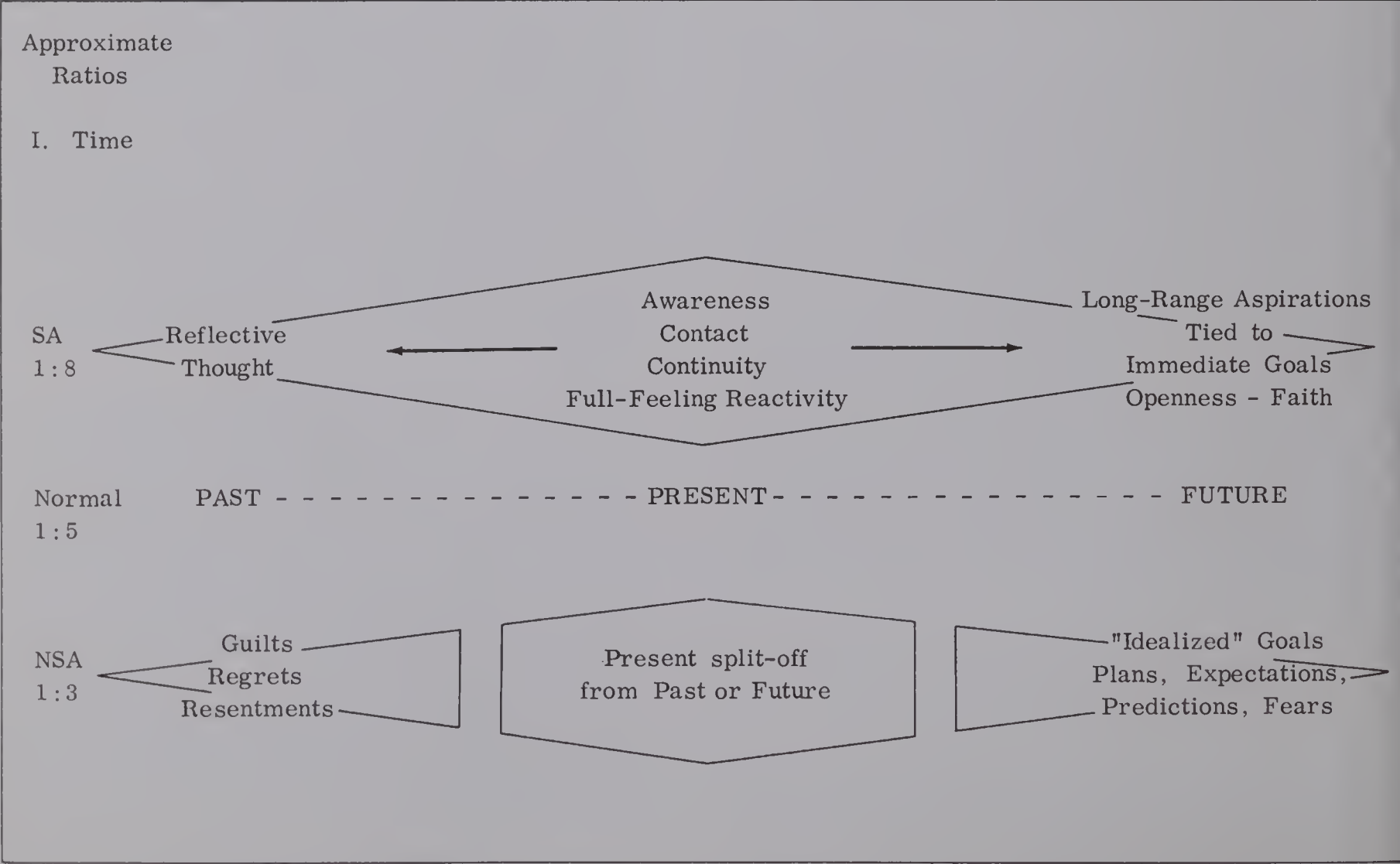


Figure 4. Comparison of "Self-Actualized," "Normal," and "Non-Self-Actualized" Groups on the POI Time Ratio.

SUPPORT RATIO

To understand the Support Ratio, counselees need first to understand the concepts of inner-direction and other-direction and how these are related to self-actualization. The summaries that follow are provided as an aid to the therapist in explaining these concepts to the counselee. Additional interpretative material on inner- and other-direction may be obtained from Reisman et al. (1950) and for self-actualization from Maslow (1954, 1962).

The Inner-Directed Person. The inner-directed person appears to have incorporated a psychic "gyroscope" which is started by parental influences and later on is further influenced by other authority figures. The inner-directed man goes through life apparently independent, but still obeying this internal piloting. The source of inner-direction seems to be implanted early in life and the direction is guided by a small number of principles. The source of direction for the individual is inner in the sense that he is guided by internal motivations rather than external influences. This source of direction becomes generalized as an inner core of principles and character traits.

The Other-Directed Person. The other-directed person appears to have been motivated to develop a radar system to receive signals from a far wider circle than just his parents. The boundary between the familial authority and other external authorities breaks down. The primary control feeling tends to be fear or anxiety of the fluctuating voices of school authorities or the peer group. There is a danger that the other-directed person may become over-sensitive to "others" opinions in matters of external conformity. Approval by others becomes for him the highest goal. Thus, all power is invested in the actual or imaginary, approving group. Manipulation in the form of pleasing others and insuring constant acceptance, becomes his primary method of relating. Thus, it can be seen that the original feeling of fear can be

transformed into an obsessive, insatiable need for affection or reassurance of being loved.

The support orientation of the self-actualizing persons tend to lie between that of the extreme other and the extreme inner-directed person. He tends to be less dependency-or deficiency-oriented than either the extreme inner- or the extreme other-directed person. He can be characterized as having more of an autonomous self-supportive, or being-orientation. Whereas he is other-directed in that he must to a degree be sensitive to people's approval, affection, and good will, the source of his actions is essentially inner-directed. He is free; but his freedom is not gained by being a rebel or pushing against others and fighting them. He transcends complete inner-directedness by critical assimilation and creative expansion of his earlier principles of living. He discovers a mode of living which gives him confidence. For the validating group the ratio between this other-directedness and his inner-directedness is approximately 1:3. This ratio contrasts to the non-self-actualized group ratio of approximately 1:1. Comparisons of the self-actualized, the normal, and non-self-actualized groups on the Support Ratio are illustrated in Figure 6.

Partial results of an item analysis are presented in Figure 7. Items which contribute most to the Inner-directed support scale are seen to be those which measure reaction to social pressures, expectations and goals. Self-actualized people appear to have liberated themselves from rigid adherence to the social pressures and social expectations to which normal or non-self-actualized people conform.

Like the Time Ratio, the Support Ratio illustrates that the self-actualized person is only to a degree self-supportive. He is typically self-supportive but some of the time he is more other oriented. Support ratios considerably above 1:3 suggest excessive autonomy and self-supportiveness.

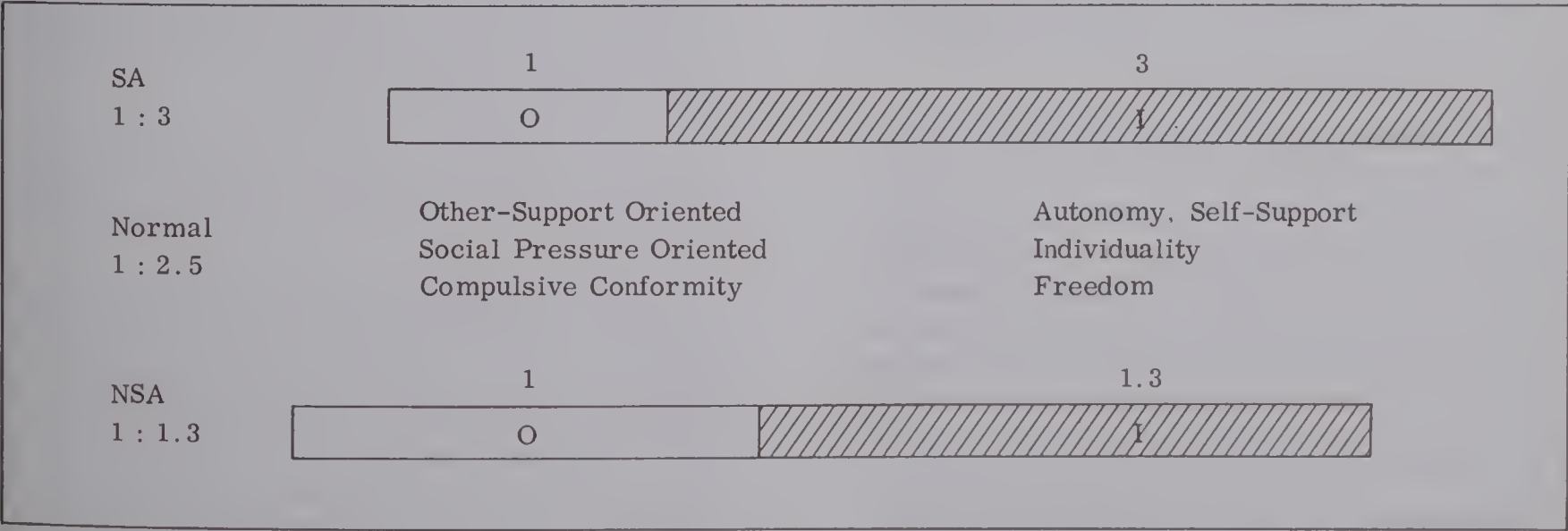


Figure 6. Comparison of "Self-Actualized," "Normal," and "Non-Self-Actualized" Groups on the POI Support Ratio.

21. I do what others expect of me.
*21. I feel free to not do what others expect of me.
41. I must justify my actions in the pursuit of my own interests.
*41. I need not justify my actions in the pursuit of my own interests.
44. I live by the rules and standards of society.
*44. I do not always need to live by the rules and standards of society.
46. Reasons are needed to justify my feelings.
*46. Reasons are not needed to justify my feelings.
61. I only feel free to express warm feelings to my friends.
*61. I feel free to express both warm and hostile feelings to my friends.
71. I will continue to grow only by setting my sights on a high-level, socially approved goal.
*71. I will continue to grow best by being myself.
91. People should always control their anger.
*91. People should express honestly felt anger.
*Denotes Inner directed response.

Figure 7. POI Items Most Highly Correlated with Inner Directed Support.

The ratio for the non-self-actualized person is about 1:1. He appears to be in a double bind of not knowing whether to conform or to act autonomously. He, therefore, probably does neither very well.

Sample Support Ratios are given in Figure 8. Raw scores are grouped in intervals of 5, and only those scores falling in the range of plus or minus two standard deviations are listed.

INTERRELATIONSHIP OF TIME AND SUPPORT

Since it is felt that the Time and the Support Ratios represent two very significant features of the POI, the following discussion of the conceptual framework underlying development of these ratios is an attempt to more carefully explain and integrate their meanings.

In considering the relative importance of past, present or future experience it has been said that Freud's system of therapy focuses primarily on the past; that

Raw Scores			
O : I			
10 : 117		1 : 11.7	
15 : 112		1 : 7.5	
20 : 107		1 : 5.4	
25 : 102	Self-actualized Range	1 : 4.1	{ Self-actualized, 1 : 3.3
30 : 97		1 : 3.2	
35 : 92		1 : 2.6	
	Normal Range		{ Normal, 1 : 2.5
40 : 87		1 : 2.2	
45 : 82		1 : 1.8	
50 : 77	Non-self-actualized Range	1 : 1.5	{ Non-self-actualized, 1 : 1.4
55 : 72		1 : 1.3	
60 : 67		1 : 1.1	
65 : 62		1 : .9	

Figure 8. Sample Support Ratio Scores.

is, psychoanalysis uses the past experiences of an individual as primary in determining his present adjustment to life. Psychoanalysis is sometimes referred to as an archeological expedition into the individual's history--the emphasis is on "having been." Perls, Hefferline and Goodman (1951, p. 38) have suggested that for psychoanalysis, delving into the past serves the purpose of finding "causes" (and thus excuses) for the present situation.

In a similar manner it may be said that Adlerian psychology, with its emphasis on goals for the individual, stresses a future orientation--and the emphasis here is on "becoming." As Perls et al. (1951, p. 38) have suggested, this orientation aggravates the usual tendency to try always to be a step ahead of actuality. Thus people who "live for the future" never catch up with the events for which they have prepared and never reap the fruits of their sowing. Their rehearsal for even the most unimportant situation may rob them of the ability to act spontaneously when it arrives.

Existential and Gestalt therapists, in contradiction to the Freudian or Adlerian, emphasize a here-and-now or "being" orientation to living, and stress the here-and-now as the significant variable for therapeutic work. If psychotherapy may be considered to be a process of value re-orientation for the patient, a significant step may be made in helping the client to realize the proper balance between past, present, and future orientations.

Personal growth toward self-actualization thus may be said to involve development of Time Competency but in addition it is seen to involve development of Inner-directedness of support. Research on the Personal Orientation Inventory has shown that there is a moderate correlation ($r = .49$ in a college sample) between Time Competence and Inner-directedness. It is suggested that the reason for this relationship lies in the fact that a self-actualizing person, who lives in the present, relies more on his own self-support and his own self-expressiveness than does the person who lives more in the past or the future. In other words, one cannot depend on anything but freely experiencing life and himself when he lives in a here-and-now orientation to life. Maslow (1962, p. 30) describes the qualities of such freedom as follows: "I have tried to express this as a contrast between living fully and preparing to live fully, between growing up and being grown."

The person who lives in the future is one who relies on expected events to motivate him. Perls (1947) suggests that ideals or goals are means whereby the need for affection, appreciation and admiration is being gratified. The person gratifies the vanity by picturing himself in terms of his goals. These invented goals are developed because he is incapable of accepting himself as he is in the here-and-now. Having lost the awareness of his biological being in the here-and-now, the individual invents a meaning for life to justify his existence. By striving for the goal of future perfection, the individual turns his own life into a living hell. With this idealistic attitude, the individual achieves the opposite of his intentions. He arrests his own natural development and promotes inferiority feelings in himself. In a similar vein, the individual who lives in the past relies on blaming others as a substitute for self-support.

Since our problems exist in the here-and-now, regardless of when they were generated, their solutions must be found in the here-and-now. For quite literally, the only time we can possibly live in is the present. We can remember the past, we can anticipate the future, but we live in the present. Even when we re-experience the past, we have not reversed

time. We have, in effect, moved the past up to the present. So, it is suggested that if psychotherapy is to help us solve our problems, it must work within the only framework we have--the here-and-now.

An alternative emphasis is that of Buhler (1962, p. 121) who says that self-actualization requires that the individual must also come to a realization of the desirable hierarchical order of goals to pursue for the future. She suggests that while values need not always be actual goals, they always represent potential goals. As potential goals, values may present a problem to an individual. One may ask himself whether a particular value is worth attaining, worth striving for or worth consideration. As she indicates, it appears doubtful that any one would be satisfied with just functioning" and "coping" with difficulties as they arise. A person cannot long be happy or even content without goals and without hope. He needs a future to look forward to, to believe in, to build on and merely coping with current problems is not a goal, and adjustment per se is not enough. Although Buhler emphasizes the future more, she also recognizes the need to tie present and future meaningfully together.

Fenichel (1945, p. 571) suggests a partial therapeutic solution to the dilemma of whether emphasis should be placed primarily on the future, past or the present. In brief, the solution involves the notion that if a patient's orientation is primarily in the past or in the future, the therapist must bring him back to present reality, if his orientation is in the present, the therapist must help him to tie the present into realistic future plans. The therapist must attempt, in effect, to bring the patient to a Time Competent orientation which ties the individual to the present, with the past memories serving as a significant learning experience and with future goals tied to here-and-now activity. Such an orientation is represented in the POI by Time Competent item alternatives such as that in 144, "For me, past, present and future is in meaningful continuity."

To summarize, we return to the idea that the healthy individual is one who lives primarily in the present. The reason for this idea is that living fully in the moment, or the present, does not require concern for support or sustenance. To say "I am adequate now" rather than "I was adequate once" or "I will be adequate again" is self-validating and self-justifying. Being in the moment, being an active process, may be said to be an end in itself. It is self-validating and self-justifying. Being has its own reward--a feeling of self-support.

INTERPRETING PROFILE SCORES

The client may be told that his scores indicate the degree to which his values are like those of self-actualized people. Some of the items that make up the scales may be read as examples. Items contributing to each scale are listed in the appendix. Experience has shown that the client usually finds it relatively easy to discuss his own values and how they compare with those of self-actualizing individuals.

COMPLEMENTARY SCALES

It has been found that interpretation is facilitated if the counselor considers the subscales in pairs (as is shown on the Profile Sheet) complementing SAV (Scale 5) with Ex (Scale 6), Fr (Scale 7) with S (Scale 8) and soon as elucidated below. These paired scales seem to be synergic and represent the balancing that is critical to self-actualization. Descriptions of these sub-scales, numbered to correspond with their appropriate scoring key, are as follows:

(5) SAV--Self-Actualizing Values

SAV (Scale 5) was derived from Maslow's concept of self-actualizing people. A high score means that the individual holds and lives by values of self-actualizing people, and a low score means he rejects values of self-actualizing people. Items in this scale cut across many characteristics but a representative SAV item stem is 38, "I live in terms of my wants, likes, dislikes and values."

(6) Ex--Existentiality

Complementing SAV (Scale 5), the Existentiality scale measures one's flexibility in applying such values or principles to one's life. It is a measure of one's ability to use good judgment in applying these general principles. Higher scores reflect flexibility in application of values. People who get low scores tend to hold values so rigidly that they may become compulsive or dogmatic.

VALUING: Paired Interpretation of Scales 5 and 6: Scale 5 (SAV) measures the degree to which one's values are like self-actualizing people. Scale 6 (Ex) measures the degree of flexibility in the application of values to living and therefore, these two scales may be considered to reflect the general area of valuing.

(7) Fr--Feeling Reactivity

A high score measures sensitivity to one's own needs and feelings. A low score shows insensitivity to one's own needs and feelings.

(8) S--Spontaneity

A high score measures the ability to express feelings in spontaneous action. A low score indicates that one is fearful of expressing feelings behaviorally.

FEEELING: Paired Interpretation of Scales 7 and 8: Scale 7 (Fr) measures sensitivity to needs and feelings within one's self, and Scale 8 (S) measures the ability to express feelings behaviorally, thus these scales may be considered to reflect the area of feeling.

(9) Sr--Self-Regard

A high score measures the ability to like one's self because of one's strength as a person. A low score indicates low self worth.

(10) Sa--Self-Acceptance

A high score measures acceptance of one's self in spite of one's weaknesses or deficiencies. A low score indicates inability to accept one's weaknesses. It is more difficult to achieve self-acceptance than self-regard. Self-actualization requires both.

SELF-PERCEPTION: Paired Interpretation of Scales 9 and 10:

Scale 9 (Sr) measures the ability to like one's self because of one's strengths and Scale 10 (Sa) measures the ability to like one's self in spite of one's weaknesses. Therefore these two scales may be considered to reflect the general area of self-perception.

(11) Nc--Nature of Man, Constructive

A high score means that one sees man as essentially good. He can resolve the goodness-evil, masculine-feminine, selfishness-unselfishness and spirituality-sensuality dichotomies in the nature of man. A high score, therefore, measures the self-actualizing ability to be synergic in understanding of human nature. A low score means that one sees man as essentially evil or bad and is not synergistic.

(12) Sy--Synergy

A high score is a measure of the ability to see opposites of life as meaningfully related. A low score means that one sees that work and play are not different, that lust and love, selfishness and selflessness, and other dichotomies are not really opposites at all.

AWARENESS: Paired Interpretation of Scales 11 and 12:

Scale 11 (Nc) measures the good-bad dichotomy in man and Scale 12 (Sy) measures the ability to relate all objects of life meaningfully. They may thereby be considered to be complementary scales reflecting the general area of awareness.

(13) A--Acceptance of Aggression

A high score measures the ability to accept anger or aggression within one's self as natural. A low score means that one denies having such feelings.

(14) C--Capacity for Intimate Contact

A high score measures the person's ability to develop meaningful, contactful, relationships with other human beings. A low score means one has difficulty with warm inter-personal relationships. Making contact may be defined as the ability to develop and maintain an "I-Thou" relationship in the here-and-now and the ability to meaningfully touch another human being. We know that intimate contact seems to be encumbered by expectations and obligations. Thus, it can be said that the climate to establish good contact is best when the individual does not over-respond to, nor does he utilize, inter-personal demand expectations and obligations. Other measured dimensions which facilitate contact are the ability to express vs. impress, being vs. pleasing, and the ability to relate intensely to another person either aggressively or tenderly.

INTERPERSONAL SENSITIVITY: Paired Interpretation of Scales 13 and 14:
Scale 13 (A) measures the acceptance of one's own aggressiveness which is necessary for human contact. Scale 14 (C) measures the ability for intimate contact. It is possible to be either assertive and aggressive or warm and loving in human contacts. Both are expressions of good interpersonal contacts and both may be considered to reflect the general area of interpersonal sensitivity.

INTERRELATIONSHIP AMONG THE SCALES

The Time Competence and Inner-Directed scales and all subscales are scored for the positive or self-actualized end of the continuums and correlations among the scales tend to be positive. Self-actualized groups are significantly higher on all scales and non-self-actualized groups tend to be lower on all scales. Normal groups tend to score in between. In the logical development of the scoring categories, they were not conceptualized as representing independent dimensions so that items may contribute to the measurement of more than one scale. The Time Competence and Inner-Directed scales are the only scales that do not have overlapping items. Intercorrelations among the POI scale are presented in Table 3.

Table 3
Intercorrelational Matrix¹ for Personal Orientation Inventory

POI Scales		2	3	4	5	6	7	8	9	10	11	12
1. Time Competent	Tc	.49	.26	.31	.20	.38	.44	.43	.19	.29	.17	.25
2. Inner Directed	I		.54	.70	.58	.71	.62	.63	.37	.41	.61	.55
3. Self-Actualizing Value	SAV			.21	.23	.45	.56	.03	.41	.58	.32	.15
4. Existentiality	Ex				.32	.42	.32	.57	.27	.36	.39	.48
5. Feeling Reactivity	Fr					.44	.25	.21	-.03	.12	.64	.53
6. Spontaneity	S						.44	.40	.17	.30	.47	.30
7. Self Regard	Sr							.21	.32	.26	.28	.23
8. Self Acceptance	Sa								.24	.22	.32	.30
9. Nature of Man	Nc									.53	-.04	-.02
10. Synergy	Sy										.28	.14
11. Acceptance of Aggression	A											.44
12. Capacity for Intimate Contact	C											

¹ Correlations are based on a college sample of 138 from a report by Knapp (1965).

SAMPLE INDIVIDUAL PROFILES

Interpretation of the POI can probably best be illustrated by examining some specific profiles. The first profile (Figure 9) is that of a well-adjusted 40-year-old business executive. Raised as a strong Catholic, he has completed 18 years of schooling and is happily married. He has a high time ratio, 1:22, and appears to be a person who is very much living in the present. His support ratio is 1:3.2 which closely matches the ideal of 1:3 of the actualizing person. All of his profile scales approximate those of the actualizing person with two exceptions -- Spontaneity is somewhat below the minimum and suggests that he is a person who does not fully express feelings behaviorally. The other low score quite a bit below that expected of self-actualizing individuals is Nature of Man. Instead of seeing man as fundamentally good, as does an actualizing person, he has been raised to regard the nature of man as fundamentally evil. This man's profile is a good example of an actualizing person, with the exception that his scores in areas of synergistic awareness and feeling spontaneity are depressed. Therapeutic analysis has revealed that in fact these low scores probably do reflect his philosophical orientation.

The second example is a profile (Figure 10) of a poorly functioning individual, a boy, age 18, who has just entered psychotherapy. His time ratio is 1:1.3 and his support ratio is 1:1.6, both very low. His scores are all well below the non-self-actualizing range. This boy may be described as a schizoid in that he has long periods of withdrawal into fantasy and his is not in good contact. He is bothered by long periods of depression as well. His Minnesota Multiphasic Personality Inventory Profile showed peaks on the Depression scale and the Schizophrenia Scale, with standard scores of 101 and 111 respectively, which tends to illustrate how POI profiles complement MMPI profiles with severely disturbed individuals.

Figure 11 is an illustration of the profile of an excessively high or pseudo-self-actualizing person. Her time ratio is 1:6.7 which is normally self-actualizing, but her Support Ratio of 1:14.9 is far in excess of the 1:3 actualizing ratio. All of her profile scores are excessively high, well above the T score range of 50 to 56 which characterizes the self-actualizing person. This 36-year-old woman is an individual who has studied a great deal of psychology, who knows the answers intellectually, but gives herself away in that she has answered the test so much in the direction of actualization that her profile is considerably above those found for self-actualizing persons and is obviously distorted.

As a further aid in familiarizing oneself with POI profiles it is suggested that the group profiles in Figure 3 for selected reference groups be studied. In particular the profiles for disparate groups such as industrial personnel men, alcoholics and hospitalized patients will be of interest.

The last phase of interpretation is at the item level. The usefulness of the inventory at this stage will depend even more upon the experience and familiarity the examiner has with the instrument. The keyed choices for each item, grouped according to scoring category, are reproduced in the appendix.

EFFECTS OF DISSIMULATION AND FAKING

Deliberate faking of responses to the POI is not likely to be a problem when used in individual counseling or therapeutic situations. Cases such as the 36-year-old female whose profile is presented in Figure 11 above are uncommon in clinical practice and are easily recognized by their excessively high profiles.

However, the question arises as to the effects of deliberate faking on POI profiles when used in situations other than for individual counseling. To investigate these effects the POI was administered to 86 beginning psychology students in a representative liberal arts college with the instructions to respond as though they were applying for a job and wanted to make a good impression. The instructions were:

"This is an experiment to determine the effects of certain response sets on questionnaires. You are asked to answer the questionnaire as though you wanted to make a good impression of yourself. You should answer as though you were applying for a job and wanted to make the most favorable impression of yourself. Remember, the objective is to make a good impression."

The results of this "fake good" set were compared with the scores of another sample of introductory psychology students at the same college. Means and standard deviations for these samples are presented in Table 4 and profiles are presented in Figure 12.

Not all the obtained differences were in the direction of greater self-actualization. Inspection of the "fake good" profile will show that it is not representative of the profiles of self-actualized individuals. Only two scales, Self-regard (Sr) and Nature of Man-constructive (Nc), approaches the average scores reported for the self-actualized validating group.

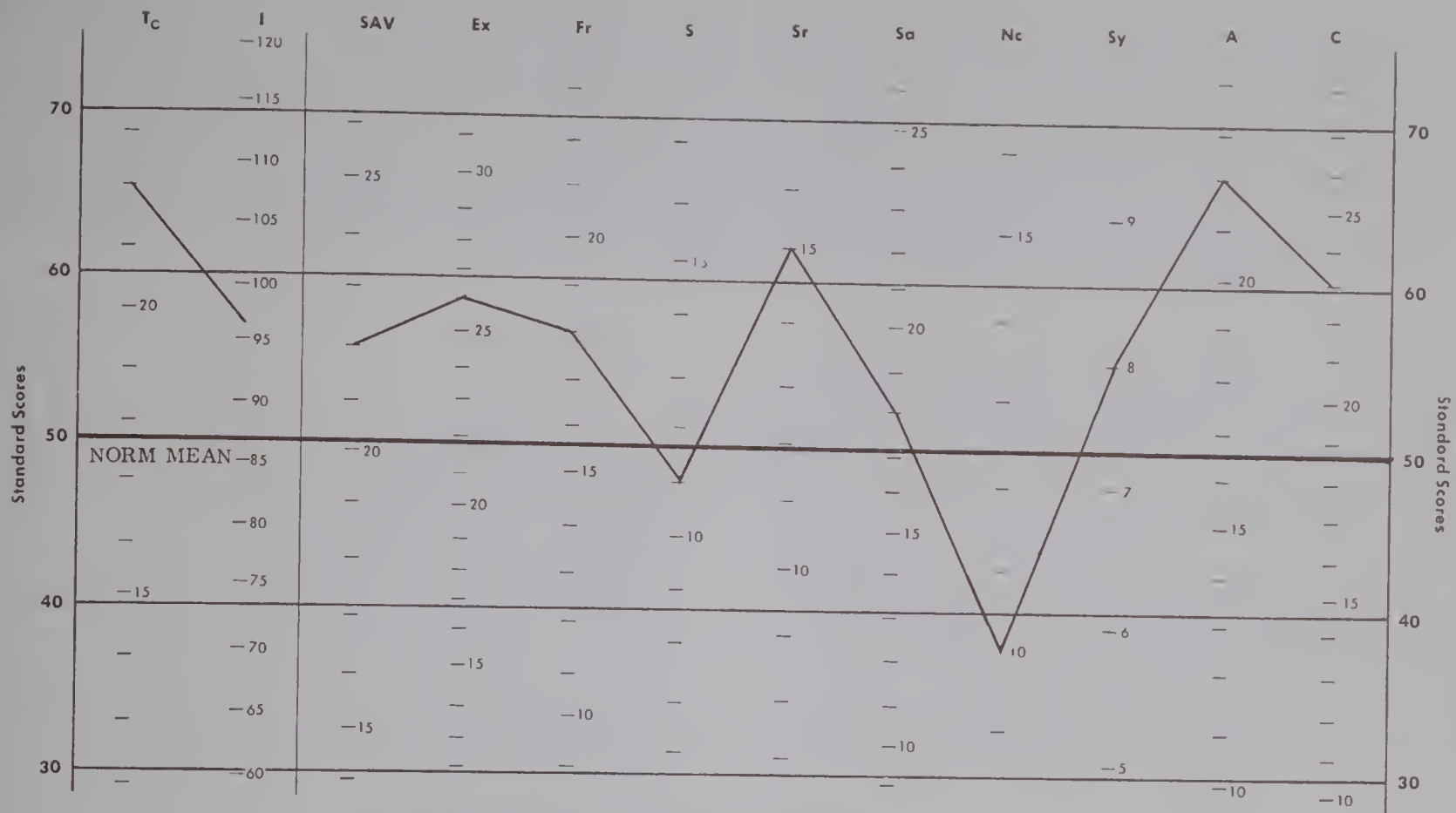


Figure 9. Profile of a Well-Adjusted Business Executive.

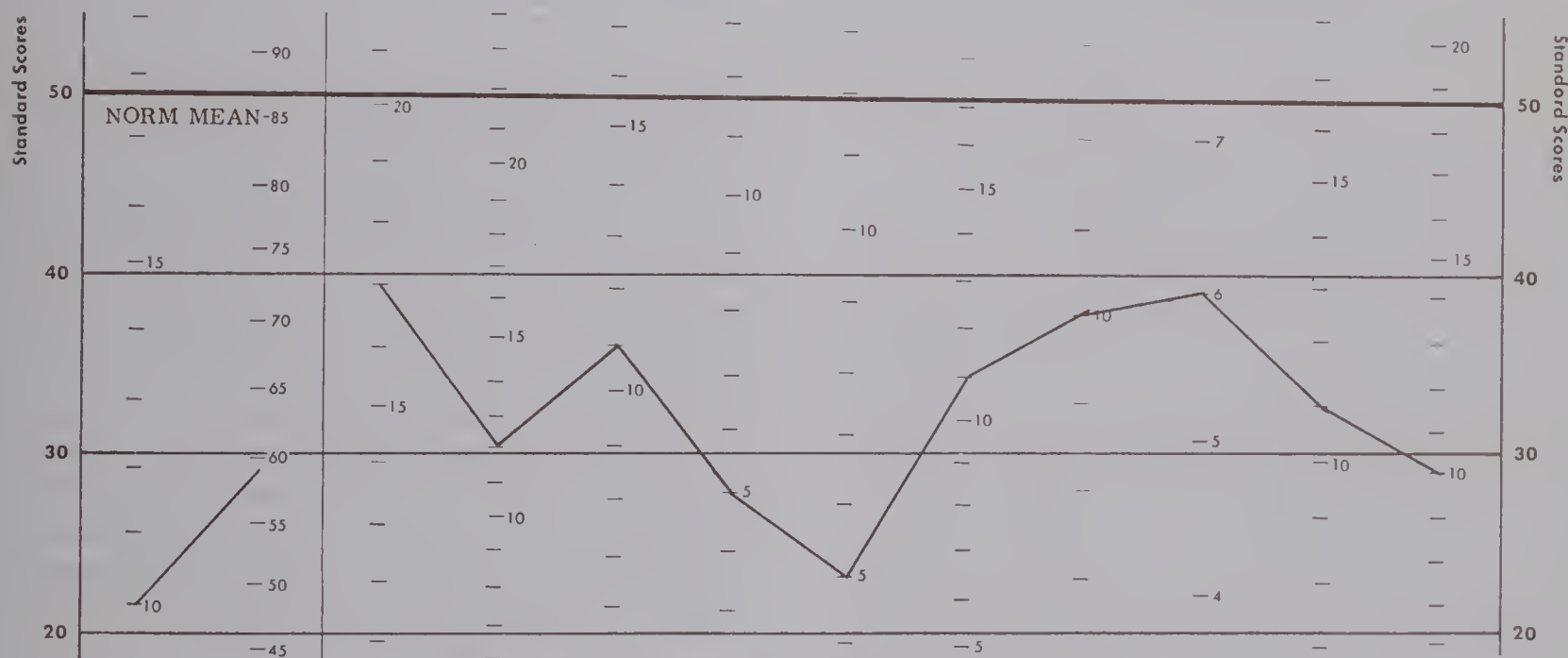


Figure 10. Profile of a Poorly Functioning Youth.

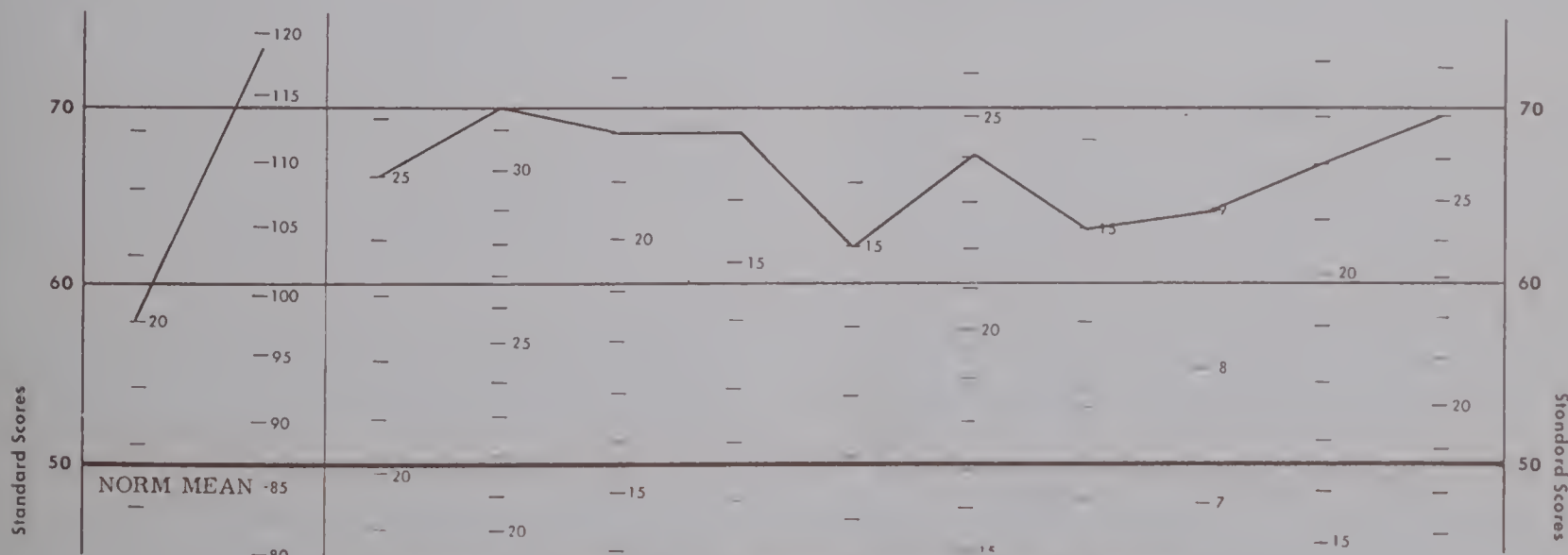


Figure 11. Profile of a "Pseudo-Self-Actualizing" Person.

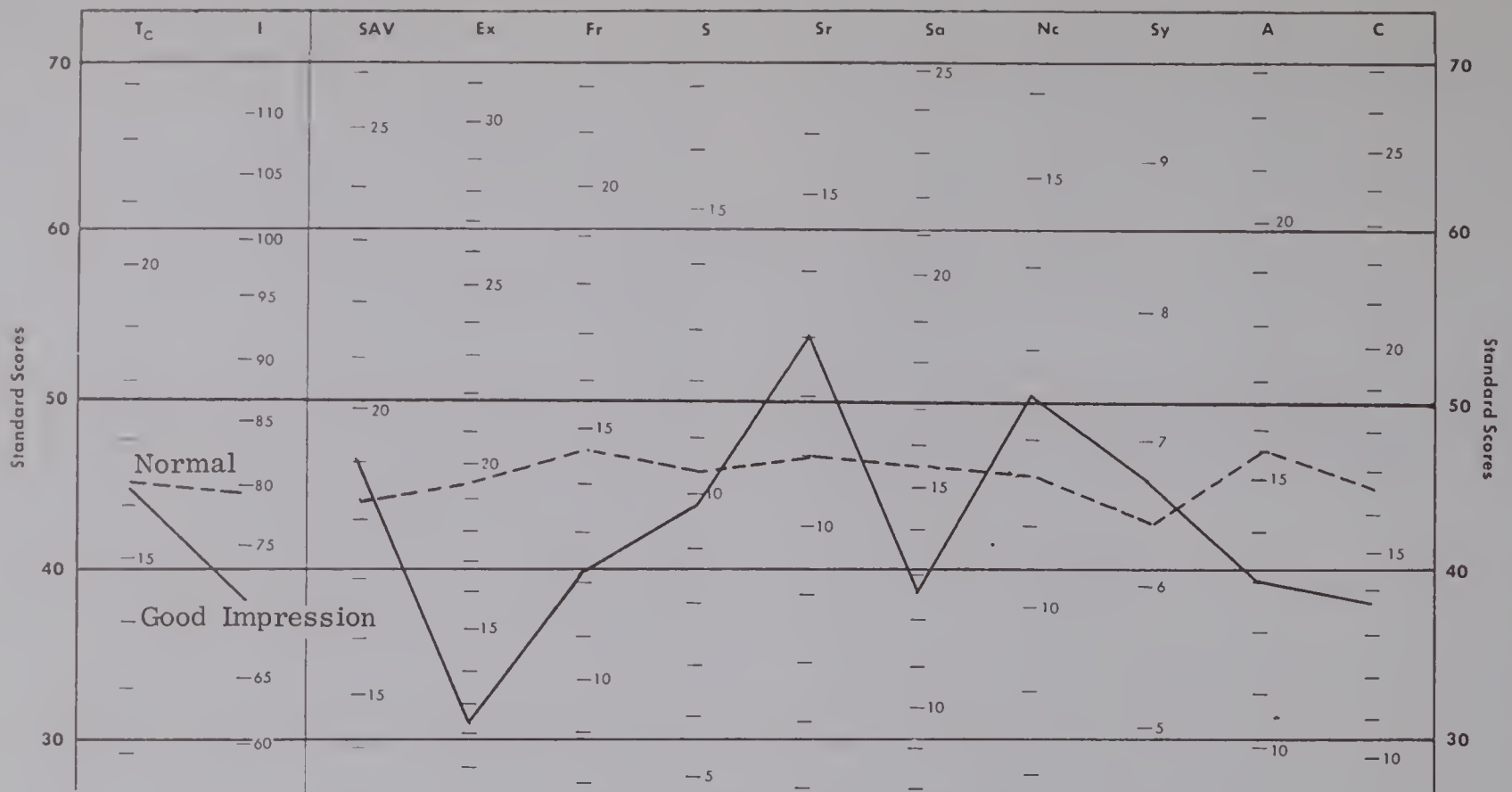


Figure 12. Profiles of College Samples Responding Under Normal Conditions and with Instructions to "Make a Good Impression."

Table 4

Means and Standard Deviations for Samples of College Students Responding Normally and with Instructions to Make a Good Impression

Scale	Normal Instructions (N = 136)		Fake Good (N = 86)	
	Mean	S. D.	Mean	S. D.
Tc	16.3	2.8	16.2	2.7
I	79.2	9.7	70.7	9.6
SAV	18.3	2.8	19.0	2.8
Ex	19.5	3.7	12.4	3.3
Fr	14.7	2.8	12.1	3.0
S	10.4	2.6	9.8	2.3
Sr	11.0	2.6	13.0	1.9
Sa	15.5	3.2	12.6	3.1
Nc	11.6	2.0	12.4	1.8
Sy	6.4	1.4	6.7	1.4
A	15.6	3.2	13.0	3.2
C	16.6	3.4	13.7	3.1

The Existentiality scale scores were distorted in the direction of emphasizing rigid adherence to traditional values--away from self-actualization. An individual who rigidly adheres to rules and principles and who compulsively fulfills all obligations might appear to be a good organization man; thus perhaps explaining the responses in the "fake good" sample who were instructed to fake as though they were applying for employment. The comparatively low mean Ex score obtained from a sample of electronics company managers presented in Figure 3 tends to support this notion. In summary, these results suggest that deliberate distortion with instructions to "make a good impression" does not produce a profile characteristic of self-actualized individuals.

PART III DEVELOPMENT VALIDITY RELIABILITY

DEVELOPMENT OF THE POI ITEMS

The Personal Orientation Inventory items reflect significant value judgment problems seen by therapists in private practice. The items were based on observed value judgments of clinically troubled patients seen by several therapists over a five year period. These items also were agreed to be related to the research and theoretical formulations of many writers in Humanistic, Existential or Gestalt Therapy. The latter include Maslow's (1954; 1962) concept of self-actualization, Reisman's et al. (1950) system of inner- and other-directedness and May's et al. (1958) and Perls' (1947; 1951) concepts of time orientation. Figure 1 (page 6) presents a summary of the scoring categories.

The work of Ellis (1962) has suggested that psychotherapy can be viewed as a process of critically examining the irrational ideas and value orientations of the patient. As Buhler (1962, pp. 30-31) has suggested, value orientations are definite existential judgments. Following Kluckhohn, she states that these value orientations symbolize the fact that affective-cognitive, or value, and strictly cognitive (orientation) elements are blended. A value-orientation may be defined as a generalized and organized conception, which influences behavior and which is a conception of nature, of man's place in it, of man's relation to man, and of the desirable and nondesirable as they may relate to man--and of the desirable and nondesirable as they may relate to man-environment and inter-human relations.

Ellis (1962, p. 41) notes that much of what is called emotion is nothing more or less than a certain kind, a biased, prejudiced, or strongly evaluative kind of thought. Therefore, an affectively loaded idea about life may be properly defined as a value. Items in the POI were designed to reflect value orientations which are commonly held, and which are considered to be significant to a person's approach to living.

Items in the Personal Orientation Inventory are stated both positively and negatively. Thus, the particular continuum or end-poles of the dichotomy in question are made explicitly clear. Authors of most other inventories have assumed that the reader knows the "opposite" of the statement in question, and that it is implicit in the question. Perls (1947, p. 17) following Roget, has made it very clear that such is often

not the case. Instead, opposites are dictated not by words but by their context. Thus, the same word often has several correlative terms, according to different relations in which it is considered. For example, both "receiving" and "taking" are opposed to the word "giving." The first correlative term refers to the persons concerned in the transfer, while the second term relates to the mode of transfer. "Old" has both "new" and "young" as opposites, depending on whether it applies to living beings or to things. Particularly in therapy it has been proven useful to explicitly state the conceptual continuum in question.

VALIDITY

NOMINATED GROUPS

Perhaps the most important test of validity, in the case of the POI, is that it should discriminate between individuals who have been observed in their life behavior to have attained a relatively high level of self-actualization from those who have not so evidenced such development. To test the POI's effectiveness in making this discrimination the Inventory was administered to two groups, one of "relatively self-actualized" and the other of relatively "non-self-actualized" adults. Persons in these two groups were carefully selected, each being nominated by practicing, certified clinical psychologists contacted through societies of clinical psychologists. N's were 29 and 34 respectively. Means and critical ratios of differences between these groups, as well as means for the normal adult sample, are presented in Table 5.

Results of this study reported by Shostrom (1964) indicate that the Inventory significantly discriminates between clinically judged self-actualized and non-self-actualized groups on 11 of the 12 scales. Figure 13 presents a graphic representation of the results showing the norm mean at the T score level of 50. The means for the self-actualized group (SA) are above the normal adult group means on 11 of the 12 scales and the means for the non-self-actualized group (NSA) are below the norm means on all scales. It is apparent that there is a consistent difference between the self-actualized group and the non-self-actualized group on this test.

Table 5

POI Scale Means for "Self-Actualized," "Normal," and "Non-Self-Actualized Groups"

POI Scale	Comparison of Total Mean Scores			Critical Ratio Between Self-Actualized and Non-Self-Actualized Groups
	Self-Actualized Group (29)	Normal Adult Group (158)	Non-Self-Actualized Group (34)	
1. T_I	3.72	5.06	7.06	4.28**
2. T_C	18.93	17.70	15.82	4.05**
3. O	31.13	37.35	49.65	5.23**
4. I	92.86	87.25	75.76	4.89**
5. SAV	20.69	20.17	18.00	2.92**
6. Ex	24.76	21.80	18.85	5.09**
7. Fr	16.28	15.74	14.26	2.43*
8. S	12.66	11.65	9.79	3.59**
9. Sr	12.90	11.97	10.21	3.96**
10. Sa	18.93	17.09	14.21	4.97**
11. Nc	12.34	12.37	11.29	1.98
12. Sy	7.62	7.32	6.18	3.69**
13. A	17.62	16.63	14.74	3.54**
14. C	20.21	18.80	16.47	5.04**
Ratio Scores				
Time T_C/T_I	7.69	5.10	2.88	
Support I/O	3.28	2.50	1.35	

* Significant at the .05 confidence level. **Significant at the .01 confidence level.

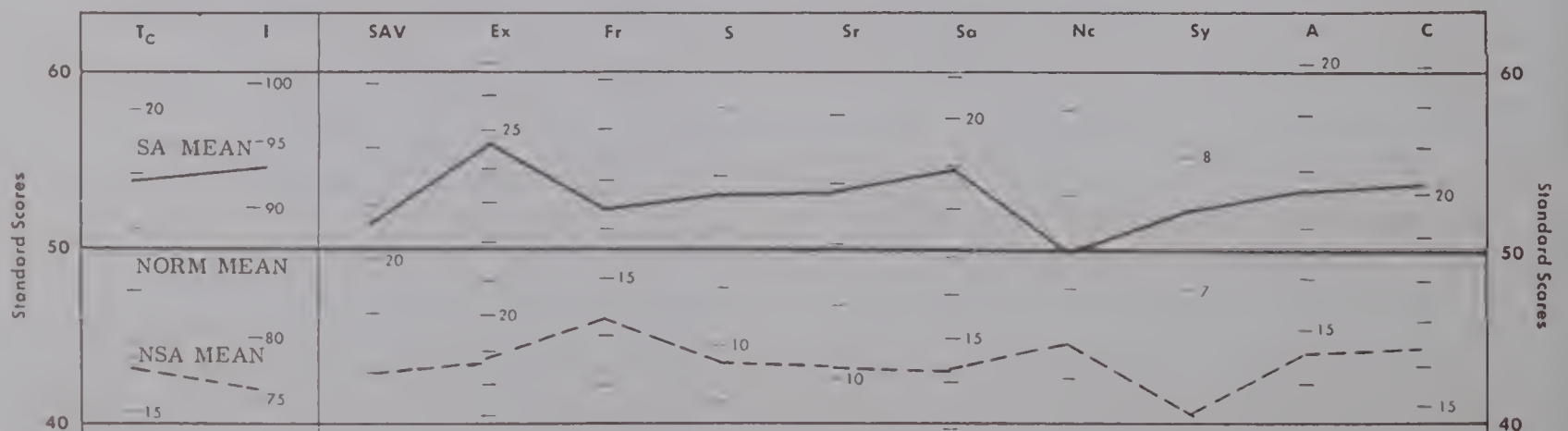


Figure 13. Profiles Based on Mean POI Scores for a Self-Actualized (SA) and a Non-Self-Actualized (NSA) Sample.

Table 6

Means, Standard Deviations and Tests of Significance of Difference Between Beginning Therapy and Advanced Therapy Groups on POI Scales

POI Scales	Beginning ¹		Advanced ²		CR
	Mean	S.D.	Mean	S.D.	
T _C	15.59	3.74	19.72	1.90	6.01 **
I	81.24	13.41	104.21	8.38	8.91 **
SAV	19.59	3.10	23.26	1.89	6.19 **
Ex	20.11	4.87	27.21	3.18	7.49 **
Fr	14.46	3.35	19.64	1.99	8.14 **
S	10.68	3.17	14.82	1.78	6.97 **
Sr	10.70	3.05	13.51	1.55	5.01 **
Sa	15.00	3.59	20.03	3.54	6.15 **
Nc	12.35	2.14	13.62	1.60	2.91 **
Sy	6.65	1.32	8.31	.83	6.54 **
A	15.62	3.62	19.38	2.95	4.96 **
C	17.78	4.01	23.05	2.70	6.69 **

1. N = 37

2. N = 39

*Significant at the .05 confidence level.

**Significant at the .01 confidence level.

A study designed to investigate further the sensitivity of the POI in clinical settings is reported by Shostrom & Knapp (1966). In this study, the POI was administered to two groups of outpatients in therapy, one a group of 37 beginning patients entering therapy and the other a sample of 39 patients in advanced states of psychotherapeutic progress. The latter group has been in therapy from 11 to 64 months with a mean time in therapy of 26.6 months.

Analysis of the POI scores showed all 12 POI scales differentiated between the criterion groups at the .01 confidence level or higher. Means, standard deviations and tests of significance of difference are presented in Table 6 and the data are graphically displayed in Figure 14. The results of administering the MMPI to these two samples were also considered. The MMPI yielded significant differentiation at the .01 confidence level on four scales, (Depression, Psychopathic Deviate, Psychasthenia, and Schizophrenia) and at the .05 confidence level on three additional scales (Hypochondriasis, Hysteria and Paranoia).

Another study in a clinical setting involving a criterion group is reported by Fox (1965a). The POI was administered to a group of 100 hospitalized psychiatric patients. All scales significantly differentiated (beyond the .001 confidence level) the hospitalized sample from the nominated self-actualized sample and from the normal adult sample. The hospitalized sample was also lower on all scales than the non-self-actualized sample. Differences reaching statistical significance at the .01 level were obtained for the major scales of Time Competence and Inner-

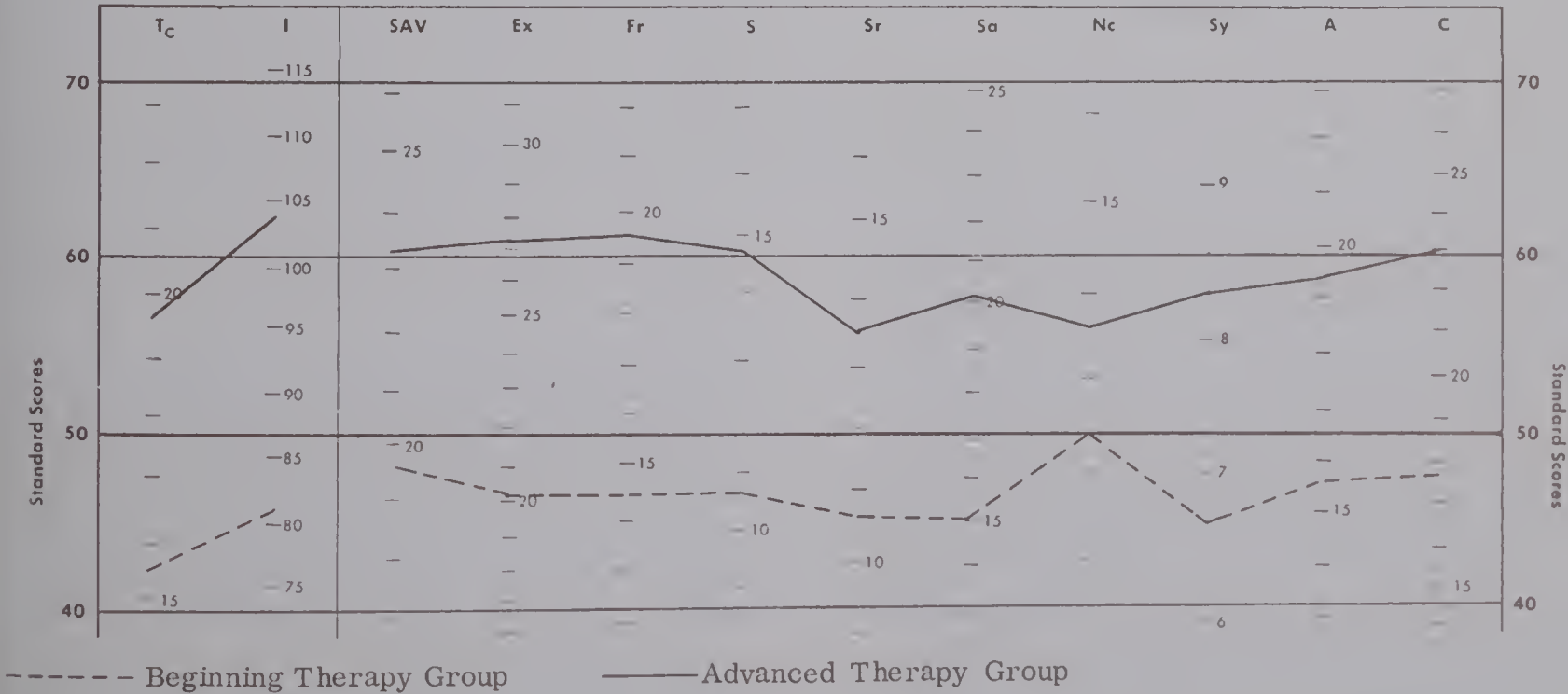


Figure 14. POI Profiles for a Beginning and an Advanced Therapy Group.

Direction and in addition several of the subscales significantly differentiated the patient sample from the non-self-actualized sample. The profile for the 100 hospitalized subjects reported on above plus an additional 85 tested in the same institution is presented in Figure 3.

Studies completed subsequent to these initial, critical studies have supported the validity of the POI as a measure of self-actualization and have contributed to enrichment of POI scale interpretation.

Studying seventy alcoholics and their spouses participating in an alcoholic treatment program, Zaccaria and Weir (1966) report all mean POI scores for this sample to be significantly lower than the original validating, clinically nominated, self-actualized sample. Further, all but one scale showed the experimental, treatment sample to be significantly lower than the normal adult sample reported by Shostrom. One scale, the Time Competence scale, was significantly lower for the alcoholic treatment group than the non-self-actualized sample. Apparently the alcoholic in particular is apt to be the person dwelling on past or future events, lacking the full awareness, contact and feeling reactivity of the more time competent person. The profile for this sample is presented in Figure 3. This same pattern showing a marked depression of the Time Competence scale can be seen in the young delinquent sample presented in Figure 3.

In a study using a pre- and post-testing design, Gade and Weir (in press) report significant differences in discrepancy scores between a group of alcoholics having individual therapy and a group not having individual therapy. All pre- and post-test score changes for the individual therapy group are in the direction of greater self-actualization.

Murray (1966) investigated the relationship of teacher success in self-actualization as measured by the POI. In her study teacher success was measured by ratings of "teacher concern for students" made by the teachers' students. Ratings for 26 high school home economics teachers were based on responses of 2,333 students. A marked difference in self-actualization was found between teachers with high ratings and those with low ratings with the more successful teachers being more self-actualized. When analyzed by grade, differences in teacher effectiveness between those relatively more self-actualized and those less self-actualized were in a consistent direction (the more self-actualized being the more successful teachers) and were significant for grades 7, 8, 9 and 10. Differences for grades 11 and 12 did not reach statistical significance.

In the study designed to investigate the effects of a series of different processes used in group guidance and their relationship to successful college adjustment, Pearson (1966) found support for the hypothesis that students exposed to a permissive, group-directed form of guidance permitting interaction between students, under the leadership of a counselor, would demonstrate a more effective adjustment to college than students exposed to other methods. Four groups were used in this study; Group 1, Small group interaction where topics originated with group members and informal discussions centered on feelings and needs of the students; Group 2, Group participation where a leader and the group members collaborated in discussing attitude and opinions; Group 3, Regular classes with leader planned topics and lecturer, and, Group 4 where students were exempted from class for the semester. Students were randomly assigned to one of these groups. The hypothesis that Group 1 would show a greater increase in POI scores was generally supported with the increase being the greatest for this group on the major scales of Time Competence and Inner Direction as well as on eight of the ten subscales.

CORRELATIONS WITH OTHER SCALES

Another form of concurrent validity is employed in determining how well the instrument correlates with other measures purporting to measure similar traits. Since there are no other instruments available specifically designed to measure the concept of self-actualization, this evidence for validity must rely primarily upon correlations with measures of general pathology.

Correlations with the MMPI scales are presented in Table 7. Correlations are based on two samples, a beginning therapy group and an advanced therapy group (Shostrom & Knapp, 1966). While the correlations of the POI scales against certain of the MMPI scales are generally consistent in the direction and significant, it is apparent that the two instruments are not measuring exactly the same aspects of mental health. Scales which appear to have particularly meaningful relationships to POI measures are the Depression scale, the Psychasthenia scale and the Social I.E. scale.

More significant relationships were obtained for the POI scales correlated with the MMPI Social I.E. Scale (Si) than any other MMPI scale. Twelve of the 24 obtained r 's were .40 or greater, which are significant beyond the .01 confidence level in both samples. The MMPI authors (Hathaway and McKinley, 1951, p. 21) present the Si scale not as a clinical scale "in the strict sense of being chiefly for use with hospitalized patients" but have found it to be widely used in counseling and guidance work. For

Table 7

Correlation of Personal Orientation Inventory Scales Against MMPI Scales

POI Scales	Symbol	MMPI Scales												
		Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si	L	F	K
Time Competence	Tc	-07	-47	-03	-31	-16	-23	-65	-52	02	-50	13	-55	50
		18	-31	02	-39	-36	-28	-31	-20	-02	-35	24	-40	44
Inner Directed	I	12	-61	12	-18	01	-27	-53	-28	27	-62	-19	-50	51
		-03	-42	-01	-04	-22	-10	-25	03	28	-49	11	-17	36
Self Actualizing Value	SAV	15	-33	04	-32	04	-21	-37	-22	36	-44	-05	-38	26
		-15	-35	-26	-21	08	-03	-22	-09	06	-35	-08	-31	29
Existentiality	Ex	13	-47	15	-12	03	-25	-40	-21	10	-47	-15	-45	47
		14	-37	13	05	-16	07	-15	14	34	-45	08	-03	31
Feeling Reactivity	Fr	06	-48	08	-02	03	-03	-33	-11	32	-46	-21	-31	28
		11	-36	09	02	-14	02	06	16	33	-28	-03	-03	23
Spontaneity	S	07	-49	05	-07	17	-07	-38	-21	33	-67	-18	-35	34
		-23	-33	-19	00	-05	-13	-33	-11	21	-38	06	-21	18
Self Regard	Sr	20	-52	10	-21	11	-34	-49	-41	33	-60	06	-48	58
		-07	-48	-22	-15	-13	-10	-34	-17	16	-34	15	-41	41
Self Acceptance	Sa	05	-52	18	-52	18	-20	-12	-28	-60	-35	-06	-45	-15
		-05	-32	11	-19	-31	-11	-27	-06	07	-45	04	-04	22
Nature of Man	Nc	04	-09	01	-25	-26	-23	-27	-19	12	-27	-10	-29	28
		01	03	11	14	-32	03	01	00	-05	-11	26	00	16
Synergy	Sy	22	-20	09	-36	-10	-15	-35	-31	08	-27	17	-51	34
		02	-22	-10	-32	-04	02	-22	-22	-11	-26	11	-27	32
Acceptance of Aggression	A	29	-53	46	09	07	-03	-38	-15	38	-61	-23	-36	52
		-04	-37	-08	-11	-12	-29	-33	-12	06	-27	-06	-10	-06
Capacity for Intimate Contact	C	06	-56	09	-10	04	-21	-38	-23	11	-46	-23	-38	48
		16	-25	16	15	-16	04	-02	07	40	-30	10	-10	28
Decimal points omitted. Correlations for the beginning therapy group are shown in the top figure of each pair and for the advanced therapy group in the lower figure.														

example, it has been found to distinguish college populations who engage in many extra-curricular activities from those not so inclined. The obtained correlations with the MMPI Si scale appear to support the notion that the POI is measuring attributes which are important in developing harmonious interpersonal relationships among "normal" populations.

Another scale against which a large number of significant POI correlations (11 out of 24 r's over .40) were obtained is the Depression (D) Scale of the MMPI. Since, in the study by Shostrom and Knapp (1966), the D scale was one of the four most effective MMPI scales in differentiating the advanced from

the beginning therapy groups, it would suggest that the related POI scales were tapping this area of "emotional morale." The Self-Regard and Inner-Direction scales of the POI each correlated over -.40 with the D scale. Consideration of the interpretation of these scales adds further credence to this hypothesis. Thus, the advanced therapy group is seen to have higher self-regard (Sr) scores and to be more inner-directed or autonomous (I).

Further examination of some of the correlations obtained between possibly complementary scales from the two instruments suggests the following hypotheses for further consideration in the other studies:

(a) D on the MMPI is a measure of retroflectiveness or intropunitiveness. The healthy counterpart of this scale, as measured by the POI, might be A (Acceptance of Aggression). The correlation of A against the MMPI scales is highest for the D scale, the obtained r 's being $-.53$ and $-.37$ for the beginning and advanced therapy groups respectively. Both A (POI) and D (MMPI) scales significantly differentiate the two groups. The data thus suggests that advanced patients in therapy have lower Depression scores on the MMPI and higher A scores on the POI relative to beginning therapy groups.

(b) Pt on the MMPI is a measure of phobias and obsessive-compulsive concerns. On the POI, the healthy complement to this characteristic would probably best be measured by S (Spontaneity) scale. Correlations of the S against the MMPI Pt scale were $-.33$ and $-.38$ for the two groups. The above results support the observed fact that patients further along in therapy have reduced anxiety and obsessive-compulsive concerns and are more spontaneous in their expression.

(c) Si on the MMPI is a measure of social alienation and withdrawal. On the POI, the healthy complement to this characteristic is perhaps best measured by the Fr, A, and C scales. Correlations of these scales averaged $.40$ against Si. Thus, it is again suggested that the beginning patients tend to display more healthy interpersonal relations as characterized by the Fr, A, and C scales of the POI.

Another test measuring related concepts of personality and mental health against which POI scales have been correlated is the Eysenck Personality Inventory (EPI) (Eysenck and Eysenck, 1963). In this study, Knapp (1965) related the personality construct of "neuroticism" to the self-actualization construct of the POI. The EPI and the POI were each administered to a sample of 136 undergraduate college students. Subjects were selected on the basis of scores on the neuroticism dimension to form a "high" neurotic group and a "low" neurotic group, and mean scores were obtained for each group on each of the POI scales. All mean differences were significant at or beyond the $.05$ level. These means are presented in Table 8 and are graphically displayed in Figure 15.

Table 8

Correlations Between the Personal Orientation Inventory (POI) and the Eysenck Personality Inventory with Means, Sigmas, and Tests of Significance of Difference for "High" Neurotic Group and a "Low" Neurotic Group on POI Scales

POI Scale and Symbol	Correlations with EPI (N = 94)		Total Group (N = 136)		High N Group (N = 38)		Low N Group (N = 35)		CR
	Neuroticism	Extraversion	M	SD	M	SD	M	SD	
Time Competence (Tc)	$-.57^{**}$	$.11$	16.30	2.80	14.45	2.81	18.20	2.24	6.33^{**}
Inner Directed (I)	$-.35^{**}$	$.33^{**}$	79.20	9.67	74.00	9.33	84.14	8.29	4.07^{**}
Self-Actualizing Value (SAV)	$-.27^{**}$	$.18$	18.25	2.75	17.08	2.64	19.03	2.77	3.07^{**}
Existentiality (Ex)	$-.11$	$.30^{**}$	19.48	3.67	18.97	3.66	21.06	3.08	2.66^{**}
Feeling Reactivity (Fr)	$-.08$	$.30^{**}$	14.74	2.81	14.16	2.90	15.34	2.71	1.81^{*}
Spontaneity (S)	$-.34^{**}$	$.39^{**}$	10.35	2.61	9.24	2.25	11.69	2.30	4.59^{**}
Self-Regard (Sr)	$-.52^{**}$	$.36^{**}$	10.98	2.64	9.32	2.34	12.83	1.61	7.51^{**}
Self-Acceptance (Sa)	$-.17$	$.10$	15.50	3.18	14.66	3.84	16.54	2.91	7.49^{**}
Nature of Man (Nc)	$-.21^{*}$	$-.05$	11.56	1.99	10.95	1.91	12.46	1.65	3.62^{**}
Synergy	$-.25^{*}$	$.06$	6.44	1.37	6.11	1.29	6.77	1.07	2.38^{**}
Acceptance of Aggression (A)	$-.09$	$.37^{**}$	15.65	3.21	14.89	3.11	16.17	3.32	1.69^{*}
Capacity for Intimate Contact (C)	$-.24^{*}$	$.26^{**}$	16.61	3.38	15.92	3.53	17.97	3.23	2.59^{**}
* $p \leq .05$. ** $p \leq .01$.									

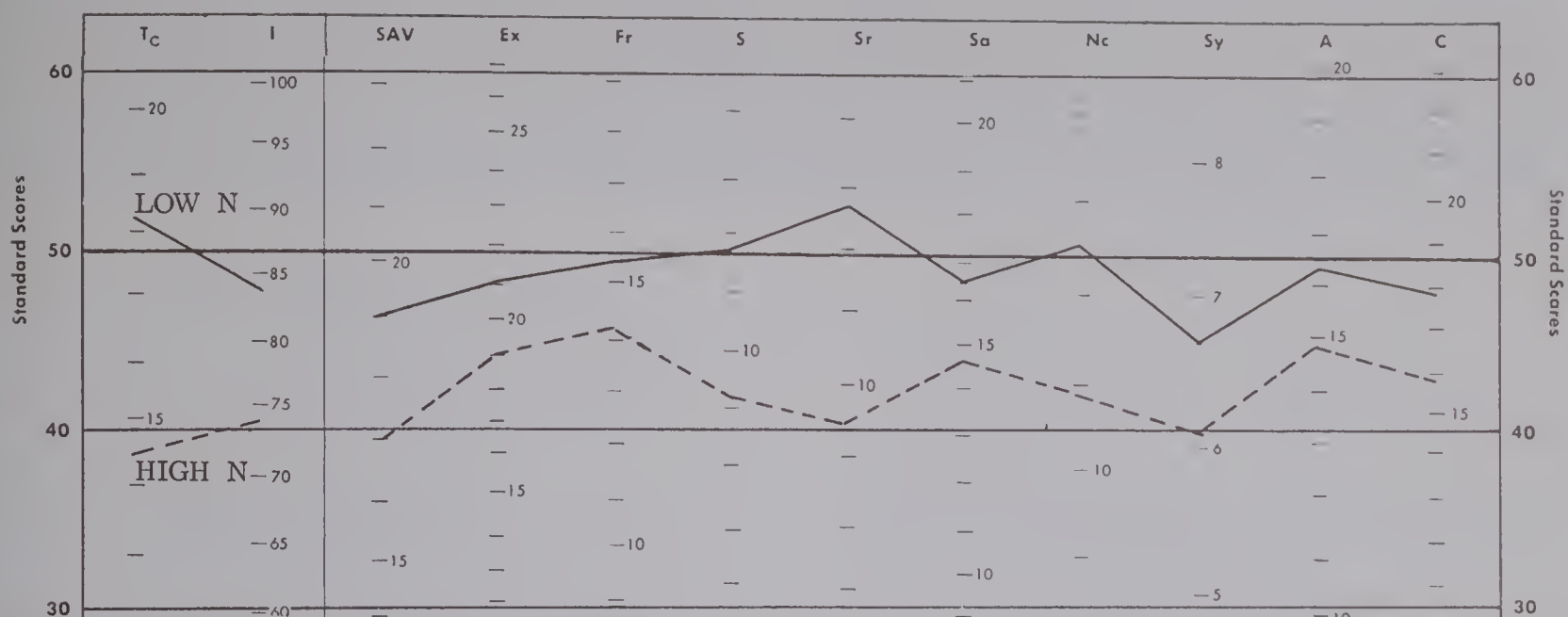


Figure 15. Profiles Based on Mean POI Scores for a "High" Neurotic (N) Sample and a "Low" Neurotic (N) Sample.

Correlations between the POI scales and the scales of the Study of Values have been obtained in a study of college sophomores entering nurses training. These correlations are presented in Table 9. The most highly related scales were Inner-Directedness and Political, the obtained correlation being .33. Other significant relationships were between Inner Directedness and Religious (-.27), Existentiality and Aesthetic (.29), Existentiality and Religious (-.31), Synergy and Theoretical (-.27), Self - acceptance and Religious (-.30), and Capacity for Intimate Contact and Social (-.30). Self-regard, Self-acceptance and Nature of man-constructive were also significantly related to Political (r's = .28, .27, .40 respectively).

Table 9

Correlations of Personal Orientation Inventory Scales with Study of Values Scales¹

POI Scales	Study of Values Scales					
	T	E	A	S	P	R
T _C	-.05	.08	.18	-.22	.08	-.03
I	.00	.03	.13	-.16	.33	-.27
SAV	-.04	.08	-.11	-.05	.16	.00
Ex	.10	-.06	.29	-.10	.11	-.31
Fr	.12	.03	-.02	-.23	-.01	.09
S	-.27	.00	.08	.00	.18	.04
Sr	-.09	.14	-.19	-.05	.28	-.01
Sa	-.04	.04	.12	-.03	.27	-.30
Nc	-.21	.04	.02	.03	.30	-.14
Sy	.10	.23	-.03	-.16	.01	-.10
A	-.01	.08	-.07	-.18	.08	.13
C	.15	.01	.19	-.30	.15	-.18

1. Based on a sample of 64 females entering nurses training. From W. T. May and R. Ilardi.

RELIABILITY

Test-retest reliability coefficients have been obtained for POI scales based on a sample of 48 undergraduate college students. The Inventory was administered twice, a week apart, to the sample with the instructions that it was part of the experiment to take the Inventory twice. The reliability coefficients are presented in Table 10.

Reliability coefficients for the major scales of Time Competence and Inner-Direction are .71 and .84 respectively, and coefficients for the subscales range from .55 to .85. In general the correlations obtained in this study are at a level as high as that reported for most personality measures.

Table 10

Test-Retest Reliability Coefficients for Personal Orientation Inventory¹

POI Scales		Test-Retest Reliability	
Time Competent	T _C	.71	
Inner Directed	I	.84	
Self-Actualizing Value	SAV	.74	
Existentiality	Ex	.85	
Feeling Reactivity	Fr	.69	
Spontaneity	S	.81	
Self-Regard	Sr	.75	
Self-Acceptance	Sa	.80	
Nature of Man	Nc	.66	
Synergy	Sy	.72	
Acceptance of Aggression	A	.55	
Capacity for Intimate Contact	C	.75	

1. Based on a sample of 48 college students from a study by Bob Klavetter.

PART IV BIBLIOGRAPHY APPENDIX

BIBLIOGRAPHY

- Allport, G. BECOMING. New Haven: Yale University Press, 1955.
- Brammer, L.M., & Shostrom, E.L. THERAPEUTIC PSYCHOLOGY: FUNDAMENTALS OF COUNSELING AND PSYCHOTHERAPY. New York: Prentice-Hall, 1960.
- Buhler, Charlotte. VALUES IN PSYCHOTHERAPY. New York: Free Press of Glencoe, 1962.
- Ellis, A. REASON AND EMOTION IN PSYCHOTHERAPY. New York: Lyle Stuart, 1962.
- Eysenck, H.J., & Eysenck, Sybil. THE EYSENCK PERSONALITY INVENTORY. San Diego: Educational and Industrial Testing Service, 1963.
- Fenichel, O. THE PSYCHOANALYTIC THEORY OF NEUROSIS. New York: Norton, 1945.
- Fox, J. On the Clinical Use of the Personal Orientation Inventory (POI). Mimeo Report, 1965. (a)
- Fox, J. Sex, Age, Hospitalization, and Self-Actualization. Mimeo Report, 1965. (b)
- Fromm, E. ESCAPE FROM FREEDOM. New York: Rinehart, 1941.
- Fromm, E. THE ART OF LOVING. New York: Harper, 1956.
- Gade, E.M., & Weir, W.R. The use of a measure of self-actualization in the outpatient treatment of alcoholics and their spouses. Journal of Alcohol Studies, in press.
- Horney, Karen. THE NEUROTIC PERSONALITY OF OUR TIME, New York: Norton, 1937.
- Horney, Karen. OUR INNER CONFLICTS. New York: Norton, 1950.
- Knapp, R.R. Relationship of a Measure of Self-Actualization to Neuroticism and Extraversion. Journal of Consulting Psychology, 1965, 29, 168-172.
- Lee, R.J. Correlates of Interest Maturity. Unpublished doctoral dissertation. Western Reserve University, Cleveland, 1965.
- Margulies, N. A Study of Organizational Culture and the Self-Actualizing Process. Unpublished doctoral dissertation. University of California, Los Angeles, 1965.
- May, R., Angel, T., & Ellenberger, H. EXISTENCE. New York: Basic Books, 1958.
- Maslow, A. MOTIVATION AND PERSONALITY. New York: Harper, 1954.
- Maslow, A. TOWARD A PSYCHOLOGY OF BEING. New York: Van Nostrand, 1962.
- Murray, M.E. An Exploration of the Relationship of Self-Actualization to Teacher Success. Unpublished masters thesis. Pennsylvania State University, University Park, Pennsylvania, 1966.
- Pearson, O. Effects of Group Guidance upon College Adjustment. Unpublished doctoral dissertation. University of Kentucky, Lexington, Kentucky.
- Perls, F. EGO, HUNGER AND AGGRESSION. London: George Allen and Unwin, Ltd., 1947.
- Perls, F., Hefferline, R., & Goodman, P. GESTALT THERAPY. New York: Julian, 1951.
- Reisman, D., Glazer, N., & Denney, R. THE LONELY CROWD. New York: Doubleday, 1950.
- Rogers, C. CLIENT-CENTERED THERAPY. Boston, Houghton Mifflin, 1951.
- Rogers, C. ON BECOMING A PERSON. Boston: Houghton Mifflin, 1961.
- Shostrom, E.L. A Test for the Measurement of Self-Actualization. Educational and Psychological Measurement, 1965, 24, 207-218.
- Shostrom, E.L., & Knapp, R.R. The Relationship of a Measure of Pathology (MMPI) and to Therapeutic Growth. American Journal of Psychotherapy, 1966, 20, 193-202.
- Super, D.E. Vocational Adjustment: Implementing a Self Concept. Occupations, 30, 1951.
- Watts, A. THE WISDOM OF INSECURITY. New York: Pantheon, 1951.
- Zaccaria, J.S., & Weir, W.R. A Comparison of Alcoholics and Selected Samples of Non-Alcoholics in terms of a Positive Concept of Mental Health. Journal of Social Psychology, 1966 (in press).

APPENDIX

KEYED ALTERNATIVES GROUPED BY SCALE

Time Incompetence Items (T_I)

- Item
Number
48. I often feel it necessary to defend my past actions.
 59. I strive always to predict what will happen in the future.
 82. I have feelings of resentment about things that are past.
 87. People should always repent their wrong-doings.
 88. I worry about the future.
 90. I prefer to save good things for future use.
 102. Only living for the moment is important.
 104. Wishing and imagining are always good.
 105. I spend more time preparing to live.
 110. Living for the future gives my life its primary meaning.
 111. I follow diligently the motto, "Don't waste your time."
 112. What I have been in the past dictates the kind of person I will be.
 113. It is of little importance to me how I live in the here and now.
 124. I feel the need to be doing something significant all of the time.
 125. I suffer from memories.
 129. I like to withdraw from others for extended periods of time.
 133. I do not like to withdraw temporarily from others.
 136. I regret my past.
 140. For me, the future often seems hopeless.
 142. My past is a handicap to my future.
 143. "Killing time" is a problem for me.
 144. For me, the present is an island, unrelated to the past and future.
 145. My hope for the future depends on having friends.

Time Competence Items (T_C)

48. I do not feel it necessary to defend my past actions.
59. I do not feel it necessary always to predict what will happen in the future.
82. I do not have feelings of resentment about things that are past.
87. People need not always repent their wrong-doings.
88. I do not worry about the future.
90. I prefer to use good things now.
102. Living for the future is as important as living for the moment.
104. Wishing and imagining can be bad.
105. I spend more time actually living.
110. Only when living for the future ties into living for the present does my life have meaning.
111. I do not feel bound by the motto, "Don't waste your time."
112. What I have been in the past does not necessarily dictate the kind of person I will be.
113. It is important to me how I live in the here and now.
124. I do not feel the need to be doing something significant all of the time.
125. I do not suffer from memories.
129. I do not like to withdraw from others for extended periods of time.
133. I like to withdraw temporarily from others.
136. I do not regret my past.
140. For me, the future usually seems hopeful.
142. My past is a stepping stone for the future.
143. "Killing time" is not a problem for me.
144. For me, past, present and future is in meaningful continuity.
145. My hope for the future does not depend on having friends.

Other-Support Items (O)

1. I am bound by the principle of fairness.
2. When a friend does me a favor, I feel that I must return it.
3. I feel I must always tell the truth.
4. If I manage the situation right, I can avoid being hurt.
5. I feel that I must strive for perfection in everything that I undertake.
6. I seldom make my decisions spontaneously.
7. I am afraid to be myself.
8. I feel obligated when a stranger does me a favor.
9. I feel that I have a right to expect others to do what I want of them.
10. I live by values which are in agreement with others.
11. I am concerned with self-improvement at all times.
12. I feel guilty when I am selfish.
13. Anger is something I try to avoid.
14. For me, anything is possible if I believe in myself.
15. I put others' interests before my own.
16. I sometimes feel embarrassed by compliments.
17. I believe it is important to understand why others are as they are.
18. I don't put off until tomorrow what I ought to do today.
19. I have a right to expect the other person to appreciate what I give.
20. My moral values are dictated by society.
21. I do what others expect of me.
22. I don't accept my weaknesses.
23. In order to grow emotionally, it is necessary to know why I act as I do.
24. I am hardly ever cross.
25. It is necessary that others approve of what I do.
26. I am afraid of making mistakes.
27. I do not trust the decisions I make spontaneously.
28. My feelings of self-worth depend on how much I accomplish.
29. I fear failure.
30. My moral values are determined, for the most part, by the thoughts, feelings, and decisions of others.
31. It is not possible to live life in terms of what I want to do.
32. I cannot cope with the ups and downs of life.
33. I do not believe in saying what I feel in dealing with others.
34. Children should realize that they do not have the same rights and privileges as adults.
35. I avoid "sticking my neck out" in my relations with others.
36. I believe the pursuit of self-interest is opposed to interest in others.
37. I have not rejected any of the moral values I was taught.
38. I do not live in terms of my wants, likes, dislikes and values.
39. I do not trust my ability to size up a situation.
40. I do not believe I have an innate capacity to cope with life.
41. I must justify my actions in the pursuit of my own interests.
42. I am bothered by fears of being inadequate.
43. I believe that man is essentially evil and cannot be trusted.
44. I live by the rules and standards of society.
45. I am bound by my duties and obligations to others.
46. Reasons are needed to justify my feelings.
47. I find it difficult to express my feelings by just being silent.
49. I like everyone I know.
50. Criticism threatens my self-esteem.
51. I believe that knowledge of what is right makes people act right.
52. I am afraid to be angry at those I love.
53. My basic responsibility is to be aware of other's needs.

Other-Support Items (O) (continued)

54. Impressing others is most important.
55. To feel right, I need always to please others.
56. I will not risk a friendship just to say or do what is right.
57. I feel bound to keep the promises I make.
58. I must avoid sorrow at all costs.
60. It is important that others accept my point of view.
61. I only feel free to express warm feelings to my friends.
62. There are very few times when it is more important to express feelings than to carefully evaluate the situation.
63. I do not welcome criticism as an opportunity for growth.
64. Appearances are all-important.
65. I hardly ever gossip.
66. I do not feel free to reveal my weaknesses among friends.
67. I should always assume responsibility for other people's feelings.
68. I do not feel free to be myself and bear the consequences.
69. I already know all I need to know about my feelings.
70. I hesitate to show my weaknesses among strangers.
71. I will continue to grow only by setting my sights on a high - level, socially approved goal.
72. I cannot accept inconsistencies within myself.
73. Man is naturally antagonistic.
74. I hardly ever laugh at a dirty joke.
75. Happiness is an end in human relationships.
76. I only feel free to show friendly feelings to strangers.
77. I try to be sincere and I am sincere.
78. Self-interest is unnatural.
79. A neutral party can measure a happy relationship by observation.
80. For me, work and play are opposites.
81. Two people will get along best if each concentrates on pleasing the other.
83. I like only masculine men and feminine women.
84. I actively attempt to avoid embarrassment whenever I can.
85. I blame my parents for a lot of my troubles.
86. I feel that a person should be silly only at the right time and place.
89. Kindness and ruthlessness must be opposites.
91. People should always control their anger.
92. The truly spiritual man is never sensual.
93. I am unable to express my feelings if they are likely to result in undesirable consequences.
94. I am often ashamed of some of the emotions that I feel bubbling up within me.
95. I have never had mysterious or ecstatic experiences.
96. I am orthodoxly religious.
97. I am completely free of guilt.
98. I have a problem in fusing sex and love.
99. I do not enjoy detachment and privacy.
100. I do not feel dedicated to my work.
101. I cannot express affection unless I am sure it will be returned.
103. It is better to be popular.
106. I am loved because I give love.
107. When I really love myself, everybody will love me.
108. I can let other people control me if I am sure they will not continue to control me.
109. As they are, people do not annoy me.
114. I have never had an experience where life seemed just perfect.
115. Evil is an intrinsic part of human nature which fights good.
116. A person can completely change his essential nature.
117. I am afraid to be tender.
118. I am not assertive and affirming.
119. Women should not be trusting and yielding.
120. I do not see myself as others see me.
121. A person who thinks about his greatest potential gets conceited.

122. Men should not be assertive and affirming.
123. I am not able to risk being myself.
126. Men and women must not be both yielding and assertive.
127. I do not like to participate actively in intense discussions.
128. I am not self-sufficient.
130. I always play fair.
131. I never feel so angry that I want to destroy or hurt others.
132. I feel uncertain and insecure in my relationships with others.
134. I cannot accept my mistakes.
135. I never find any people who are stupid and uninteresting.
137. Just being myself is not helpful to others.
138. I have not had moments of intense happiness when I felt like I was experiencing a kind of bliss.
139. People have an instinct for evil.
141. People are not both good and evil.
146. I cannot like people unless I also approve of them.
147. People are not basically good.
148. Honesty is always the best policy.
149. I feel uncomfortable with anything less than a perfect performance.
150. I can overcome any obstacles as long as I believe in myself.

Inner-Support Items (I)

1. I am not absolutely bound by the principle of fairness.
2. When a friend does me a favor, I do not feel that I must return it.
3. I do not always tell the truth.
4. No matter how hard I try, my feelings are often hurt.
5. I do not feel that I must strive for perfection in everything that I undertake.
6. I often make my decisions spontaneously.
7. I am not afraid to be myself.
8. I do not feel obligated when a stranger does me a favor.
9. I do not feel that I have a right to expect others to do what I want of them.
10. I live by values which are primarily based on my own feelings.
11. I am not concerned with self-improvement at all times.
12. I don't feel guilty when I am selfish.
13. I have no objection to getting angry.
14. I have a lot of natural limitations even though I believe in myself.
15. I do not put others' interests before my own.
16. I am not embarrassed by compliments.
17. I believe it is important to accept others as they are.
18. I can put off until tomorrow what I ought to do today.
19. I can give without requiring the other person to appreciate what I give.
20. My moral values are self-determined.
21. I feel free to not do what others expect of me.
22. I accept my weaknesses.
23. In order to grow emotionally, it is not necessary to know why I act as I do.
24. Sometimes I am cross when I am not feeling well.
25. It is not always necessary that others approve of what I do.
26. I am not afraid of making mistakes.
27. I trust the decisions I make spontaneously.
28. My feelings of self-worth do not depend on how much I accomplish.
29. I don't fear failure.
30. My moral values are not determined, for the most part, by the thoughts, feelings and decisions of others.
31. It is possible to live life in terms of what I want to do.
32. I can cope with the ups and downs of life.
33. I believe in saying what I feel in dealing with others.
34. It is not important to make an issue of rights and privileges.

Inner-Support Items (I) (continued)

35. I can "stiek my neck out" in my relations with others.
36. I believe the pursuit of self-interest is not opposed to interest in others.
37. I find that I have rejected many of the moral values I was taught.
38. I live in terms of my wants, likes, dislikes, and values.
39. I trust my ability to size up a situation.
40. I believe I have an innate capacity to cope with life.
41. I need not justify my actions in the pursuit of my own interests.
42. I am not bothered by fears of being inadequate.
43. I believe that man is essentially good and can be trusted.
44. I do not always need to live by the rules and standards of society.
45. I am not bound by my duties and obligations to others.
46. Reasons are not needed to justify my feelings.
47. There are times when just being silent is the best way I can express my feelings.
49. I do not like everyone I know.
50. Criticism does not threaten my self-esteem.
51. I do not believe that knowledge of what is right necessarily makes people act right.
52. I feel free to be angry at those I love.
53. My basic responsibility is to be aware of my own needs.
54. Expressing myself is most important.
55. I can feel right without always having to please others.
56. I will risk a friendship in order to say or do what I believe is right.
57. I do not always feel bound to keep the promises I make.
58. It is not necessary for me to avoid sorrow.
60. It is not necessary for others to accept my point of view.
61. I feel free to express both warm and hostile feelings to my friends.
62. There are many times when it is more important to express feelings than to carefully evaluate the situation.
63. I welcome criticism as an opportunity for growth.
64. Appearances are not terribly important.
65. I gossip a little at times.
66. I feel free to reveal my weaknesses among friends.
67. I need not always assume responsibility for other people's feelings.
68. I feel free to be myself and bear the consequences.
69. As life goes on, I continue to know more and more about my feelings.
70. I do not hesitate to show my weaknesses among strangers.
71. I will continue to grow best by being myself.
72. I accept inconsistencies within myself.
73. Man is naturally cooperative.
74. I don't mind laughing at a dirty joke.
75. Happiness is a by-product in human relationships.
76. I feel free to show both friendly and unfriendly feelings to strangers.
77. I try to be sincere but I sometimes fail.
78. Self-interest is natural.
79. A neutral party cannot measure a happy relationship by observation.
80. For me, work and play are the same.
81. Two people can get along best if each person feels free to express himself.
83. I like men and women who show masculinity as well as femininity.
84. I do not actively attempt to avoid embarrassment.
85. I do not blame my parents for my troubles.
86. I can be silly when I feel like it.
89. Kindness and ruthlessness need not be opposites.
91. People should express honestly felt anger.
92. The truly spiritual man is sometimes sensual.
93. I am able to express my feelings even when they sometimes result in undesirable consequences.
94. I do not feel ashamed of my emotions.
95. I have had mysterious or ecstatic experiences.

96. I am not orthodoxly religious.
97. I am not free of guilt.
98. I have no problem in fusing sex and love.
99. I enjoy detachment and privacy.
100. I feel dedicated to my work.
101. I can express affection regardless of whether it is returned.
103. It is better to be yourself.
106. I am loved because I am lovable.
107. When I really love myself, there will still be those who won't love me.
108. I can let other people control me.
109. As they are, people sometimes annoy me.
114. I have had an experience where life seemed just perfect.
115. Evil is the result of frustration in trying to be good.
116. A person can never change his essential nature.
117. I am not afraid to be tender.
118. I am assertive and affirming.
119. Women should be trusting and yielding.
120. I see myself as others see me.
121. It is a good idea to think about your greatest potential.
122. Men should be assertive and affirming.
123. I am able to risk being myself.
126. Men and women must be both yielding and assertive.
127. I like to participate actively in intense discussions.
128. I am self-sufficient.
130. Sometimes I cheat a little.
131. Sometimes I feel so angry I want to destroy or hurt others.
132. I feel certain and secure in my relationships with others.
134. I can accept my mistakes.
135. I find some people who are stupid and uninteresting.
137. Being myself is helpful to others.
138. I have had moments of intense happiness when I felt like I was experiencing a kind of ecstasy or bliss.
139. People do not have an instinct for evil.
141. People are both good and evil.
146. I can like people without having to approve of them.
147. People are basically good.
148. There are times when honesty is not the best policy.
149. I can feel comfortable with less than a perfect performance.
150. I cannot overcome every obstacle even if I believe in myself.

Self-Actualizing Value (SAV)

6. I often make my decisions spontaneously.
10. I live by values which are primarily based on my own feelings.
20. My moral values are self-determined.
27. I trust the decisions I make spontaneously.
36. I believe the pursuit of self-interest is not opposed to interest in others.
38. I live in terms of my wants, likes, dislikes and values.
43. I believe that man is essentially good and can be trusted.
68. I feel free to be myself and bear the consequences.
80. For me, work and play are the same.
89. Kindness and ruthlessness need not be opposites.
92. The truly spiritual man is sometimes sensual.
98. I have no problem in fusing sex and love.
99. I enjoy detachment and privacy.
100. I feel dedicated to my work.
103. It is better to be yourself.
114. I have had an experience where life seemed just perfect.
118. I am assertive and affirming.
121. It is a good idea to think about your greatest potential.
123. I am able to risk being myself.
128. I am self-sufficient.
133. I like to withdraw temporarily from others.
135. I find some people who are stupid and uninteresting.
138. I have had moments of intense happiness when I felt like I was experiencing a kind of ecstasy or bliss.

Self-Actualizing Value (SAV) (continued)

- 141. People are both good and evil.
- 146. I can like people without having to approve of them.
- 147. People are basically good.

Existentiality (Ex)

- 1. I am not absolutely bound by the principle of fairness.
- 2. When a friend does me a favor, I do not feel that I must return it.
- 3. I do not always tell the truth.
- 5. I do not feel that I must strive for perfection in everything that I undertake.
- 8. I do not feel obligated when a stranger does me a favor.
- 9. I do not feel that I have a right to expect others to do what I want of them.
- 11. I am concerned with self-improvement at all times.
- 18. I can put off until tomorrow what I ought to do today.
- 19. I can give without requiring the other person to appreciate what I give.
- 21. I feel free to not do what others expect of me.
- 31. It is possible to live life in terms of what I want to do.
- 36. I believe the pursuit of self-interest is not opposed to interest in others.
- 44. I do not always need to live by the rules and standards of society.
- 45. I am not bound by my duties and obligations to others.
- 54. Expressing myself is most important.
- 56. I will risk a friendship in order to say or do what I believe is right.
- 57. I do not always feel bound to keep the promises I make.
- 64. Appearance is not terribly important.
- 67. I need not always assume responsibility for other people's feelings.
- 74. I don't mind laughing at a dirty joke.
- 80. For me, work and play are the same.
- 86. I can be silly when I feel like it.
- 89. Kindness and ruthlessness need not be opposites.
- 92. The truly spiritual man is sometimes sensual.
- 96. I am not orthodoxly religious.
- 98. I have no problem in fusing sex and love.
- 111. I do not feel bound by the motto, "Don't waste your time."
- 124. I do not feel the need to be doing something significant all of the time.
- 130. Sometimes I cheat a little.
- 143. "Killing time" is not a problem for me.
- 148. There are times when honesty is not the best policy.
- 149. I can feel comfortable with less than a perfect performance.

Feeling Reactivity (Fr)

- 4. No matter how hard I try, my feelings are often hurt.
- 10. I live by values which are primarily based on my own feelings.
- 13. I have no objection to getting angry.
- 15. I do not put others' interests before my own.
- 16. I sometimes feel embarrassed by compliments.
- 33. I believe in saying what I feel in dealing with others.
- 38. I live in terms of my wants, likes, dislikes and values.
- 47. There are times when just being silent is the best way I can express my feelings.
- 52. I feel free to be angry at those I love.
- 53. My basic responsibility is to be aware of my own needs.
- 55. I can feel right without always having to please others.
- 58. It is not necessary for me to avoid sorrow.
- 61. I feel free to express both warm and hostile feelings to my friends.
- 62. There are many times when it is more important to express feelings than to carefully evaluate the situation.

Feeling Reactivity (Fr) (continued)

- 69. As life goes on, I continue to know more and more about my feelings.
- 76. I feel free to show both friendly and unfriendly feelings to strangers.
- 91. People should express honestly felt anger.
- 93. I am able to express my feelings even when they sometimes result in undesirable consequences.
- 94. I do not feel ashamed of my emotions.
- 95. I have had mysterious or ecstatic experiences.
- 101. I can express affection regardless of whether it is returned.
- 117. I am not afraid to be tender.
- 131. Sometimes I feel so angry I want to destroy or hurt others.

Spontaneity (S)

- 1. I am not absolutely bound by the principle of fairness.
- 6. I often make my decisions spontaneously.
- 27. I trust the decisions I make spontaneously.
- 35. I can "stick my neck out" in my relations with others.
- 41. I need not justify my actions in the pursuit of my own interests.
- 52. I feel free to be angry at those I love.
- 54. Expressing myself is most important.
- 62. There are many times when it is more important to express feelings than to carefully evaluate the situation.
- 68. I feel free to be myself and bear the consequences.
- 74. I don't mind laughing at a dirty joke.
- 81. Two people can get along best if each person feels free to express himself.
- 84. I do not actively attempt to avoid embarrassment.
- 85. I do not blame my parents for my troubles.
- 86. I can be silly when I feel like it.
- 101. I can express affection regardless of whether it is returned.
- 123. I am able to risk being myself.
- 137. Being myself is helpful to others.
- 138. I have had moments of intense happiness when I felt like I was experiencing a kind of ecstasy or bliss.

Self-Regard (Sr)

- 7. I am not afraid to be myself.
- 16. I am not embarrassed by compliments.
- 31. It is possible to live life in terms of what I want to do.
- 32. I can cope with the ups and downs of life.
- 38. I live in terms of my wants, likes, dislikes and values.
- 39. I trust my ability to size up a situation.
- 40. I believe I have an innate capacity to cope with life.
- 48. I do not feel it necessary to defend my past actions.
- 60. It is not necessary for others to accept my point of view.
- 68. I feel free to be myself and bear the consequences.
- 78. Self-interest is natural.
- 118. I am assertive and affirming.
- 121. It is a good idea to think about your greatest potential.
- 128. I am self-sufficient.
- 132. I feel certain and secure in my relationships with others.
- 149. I can feel comfortable with less than a perfect performance.

Self-Acceptance (Sa)

- 3. I do not always tell the truth.
- 5. I do not feel that I must strive for perfection in everything that I undertake.
- 12. I don't feel guilty when I am selfish.
- 14. I have a lot of natural limitations even though I believe in myself.

Self-Acceptance (Sa) (continued)

22. I accept my weaknesses.
24. Sometimes I am cross when I am not feeling well.
26. I am not afraid of making mistakes.
28. My feelings of self-worth do not depend on how much I accomplish.
29. I don't fear failure.
37. I find that I have rejected many of the moral values I was taught.
41. I need not justify my actions in the pursuit of my own interests.
42. I am not bothered by fears of being inadequate.
48. I do not feel it necessary to defend my past actions.
50. Criticism does not threaten my self-esteem.
63. I welcome criticism as an opportunity for growth.
65. I gossip a little at times.
66. I feel free to reveal my weaknesses among friends.
70. I do not hesitate to show my weaknesses among strangers.
71. I will continue to grow best by being myself.
72. I accept inconsistencies within myself.
77. I try to be sincere but I sometimes fail.
87. People need not always repent their wrong-doings.
107. When I really love myself, there will still be those who won't love me.
128. I am not self-sufficient.
134. I can accept my mistakes.
150. I cannot overcome every obstacle even if I believe in myself.

Nature of Man (Nc)

36. I believe the pursuit of self-interest is not opposed to interest in others.
40. I believe I have an innate capacity to cope with life.
43. I believe that man is essentially good and can be trusted.
73. Man is naturally cooperative.
78. Self-interest is natural.
83. I like men and women who show masculinity as well as femininity.
92. The truly spiritual man is sometimes sensual.
98. I have no problem in fusing sex and love.
115. Evil is the result of frustration in trying to be good.
116. A person can never change his essential nature.
119. Women should be trusting and yielding.
122. Men should be assertive and affirming.
126. Men and women must be both yielding and assertive.
139. People do not have an instinct for evil.
141. People are both good and evil.
147. People are basically good.

Synergy (Sy)

36. I believe the pursuit of self-interest is not opposed to interest in others.
80. For me, work and play are the same.
89. Kindness and ruthlessness need not be opposites.
92. The truly spiritual man is sometimes sensual.
98. I have no problem in fusing sex and love.
137. Being myself is helpful to others.
141. People are both good and evil.
144. For me, past, present and future is in meaningful continuity.
146. I can like people without having to approve of them.

Acceptance of Aggression (A)

13. I have no objection to getting angry.
24. Sometimes I am cross when I am not feeling well.
33. I believe in saying what I feel in dealing with others.
50. Criticism does not threaten my self-esteem.
52. I feel free to be angry at those I love.

Acceptance of Aggression (A) (continued)

56. I will risk a friendship in order to say or do what I believe is right.
61. I feel free to express both warm and hostile feelings to my friends.
63. I welcome criticism as an opportunity for growth.
70. I do not hesitate to show my weaknesses among strangers.
73. Man is naturally antagonistic.
76. I feel free to show both friendly and unfriendly feelings to strangers.
79. A neutral party cannot measure a happy relationship by observation.
84. I do not actively attempt to avoid embarrassment.
89. Kindness and ruthlessness need not be opposites.
91. People should express honestly felt anger.
93. I am able to express my feelings even when they sometimes result in undesirable consequences.
109. As they are, people sometimes annoy me.
115. Evil is an intrinsic part of human nature which fights good.
118. I am assertive and affirming.
122. Men should be assertive and affirming.
123. I am able to risk being myself.
130. Sometimes I cheat a little.
131. Sometimes I feel so angry I want to destroy or hurt others.
135. I find some people who are stupid and uninteresting.
146. I can like people without having to approve of them.

Capacity for Intimate Contact (C)

1. I am not absolutely bound by the principle of fairness.
2. When a friend does me a favor, I do not feel that I must return it.
8. I do not feel obligated when a stranger does me a favor.
19. I can give without requiring the other person to appreciate what I give.
21. I feel free to not do what others expect of me.
25. It is not always necessary that others approve of what I do.
33. I believe in saying what I feel in dealing with others.
36. I believe the pursuit of self-interest is not opposed to interest in others.
44. I do not always need to live by the rules and standards of society.
45. I am not bound by my duties and obligations to others.
49. I do not like everyone I know.
52. I feel free to be angry at those I love.
53. My basic responsibility is to be aware of my own needs.
54. Expressing myself is most important.
55. I can feel right without always having to please others.
57. I do not always feel bound to keep the promises I make.
60. It is not necessary for others to accept my point of view.
61. I feel free to express both warm and hostile feelings to my friends.
67. I need not always assume responsibility for other people's feelings.
70. I do not hesitate to show my weaknesses among strangers.
76. I feel free to show both friendly and unfriendly feelings to strangers.
81. Two people can get along best if each person feels free to express himself.
103. It is better to be yourself.
106. I am loved because I am lovable.
107. When I really love myself, there will still be those who won't love me.
108. I can let other people control me.
117. I am not afraid to be tender.
127. I like to participate actively in intense discussions.

APPENDIX 2

IMPRESSIONS OF THEIR EXPERIENCE BY THE
TEACHERS OF THE EXPERIMENTAL GROUP

APPENDIX 2

IMPRESSIONS OF THEIR EXPERIENCE BY THE
TEACHERS OF THE EXPERIMENTAL GROUPTeacher A:

1. Will we ever know whether or not we have gained?
2. I find that I am now more concerned and aware of why students, teachers, and others act the way they do.
3. I feel an increased sensitivity and awareness of others.
4. In this experiment we were criticized by our peers. This aided growth.
5. I noticed a definite change in my classes and myself. However, would this have occurred without this experiment--simply due to more experience?
6. Often sessions were tiring, but as we got to know each other and loosened up, the time was often too short.
7. I still have highs and lows in my classes but this no longer depresses me and I have begun to look at why.
8. I feel that I am now more frequently analyzing the reactions of myself and my students in class situations.

9. I have been freed from having to "save face" or maintain "prestige" in the classroom. Therefore I am able to do more experimenting.

10. I think this experiment has resulted in an increase in confidence in the classroom.

11. I have become more student oriented rather than teacher oriented.

Teacher B:

1. The elements of this study which affected me most directly included time, tape-recording, progress, and new concepts and ideas.

2. First, time was important. Using tapes and tape-recorders in the classroom subtracts about five minutes from a class, especially when a teacher must move from one classroom to another, carrying the tape-recorder. Time was also a problem for meetings. With five people in one group, many conflicts of time were encountered, thus making it impossible for all to meet together. Even meetings of two people were often difficult to schedule.

3. Tapes provided two main problems. First, the classes' reaction to the presence of a tape-recorder is often false. For example, a quiet class becomes very noisy and vice versa. Second, the tapes were to be used

as a learning experience. This meant they had to be listened to, and again time was not always available.

4. When I entered this experiment, I had high hopes that within a month or so I would become a master teacher. I was anxious to try out new ideas, to improve or cast out old methods, and to make teaching more enjoyable. At first many ideas seemed to work but I soon reached a plateau where nothing new would have worked and I would have quit had there not been a commitment. Also, I was working specifically on a questioning technique and this became increasingly worse rather than better. By the end of the experiment, I believe I had become more open-minded about students' reactions and about experimentation.

5. About the biggest problem I had was that of accepting new ideas about changing education. This study helped me to become more aware of such experiments and changes. However, some ideas were difficult to accept. The study also opened my mind more to the teacher's position in the school, what he is doing, and where he belongs in the school.

6. One thing I believe the study did was to instigate more of a desire within me to become a better teacher, to realize what is happening in the classroom, and to realize how education must cope with a changing society.

Teacher D:

1. Before the experiment conducted by Mr. Rosborough, as a result of my first year of teaching, I was definitely dissatisfied to the point that I had decided to quit the profession. I felt this way because students seemed to be unresponsive, in fact "balky," because the administration seemed restrictive and oppressive, and because there was a paucity of personal freedom within the school situation. After careful consideration, however, I decided it would be unfair to make a judgment on the basis of one year's experience, so I decided to stay for one additional year and see what happened.

2. A number of events occurred. One event was this experiment. I have always been intensely interested in discovering why people act and react as they do in given situations, particularly myself. The group discussions in this experiment permitted, even compelled me to recognize my strengths and weaknesses in the teaching situation, as well compelling me to spot the strengths and weaknesses of my colleagues which I could incorporate or avoid in my own circumstances. This process of self-analysis extended beyond the group work into my extra school life.

3. Another event that has probably influenced my

thinking concerning education, was an experiment in Team or Co-operative Teaching that I was involved in throughout the complete school year. As a result of this experiment, plus the Team Teaching, I tried a small experiment in an English 30 class, where selected students were allowed to take the poetry portion of the course, organize it on their own and conduct it on their own with only occasional reference to myself. Although mistakes were made, the independent group enjoyed their group work more--and they certainly obtained more from it than they had been procuring from regular class sessions. There was a noticeable increase in their regular classroom participation when they returned to the class for a review course for the English 30 program.

4. Generally, I feel that as a result of one additional year of experience, Team Teaching, my own experimentation, and this experiment, there has been a decided increase in my awareness and appreciation of:

- a. Myself and my teaching role.
- b. The "human-ness" of my colleagues.
- c. The role and outlook of the school.
- d. What teaching should involve for me.

5. An additional note should be added, that as a result of this year's experiences, in particular this

experiment and Team Teaching, I have asked to be transferred to a school that is now experimenting in the field of Team Teaching where I hope to institute some of the ideas in group dynamics that have grown directly from this experiment.

Teacher C:

1. It is my feeling that teacher attitude changes in the classroom situation are desirable. Yet, when it comes to implement such changes, I foresee difficulties in my own instance.

2. First, I sense that I do not want to change. The reason perhaps may be that I came through a system where a teacher generally would not think of it (and we learn by imitation).

3. Second, I feel that I often do not know how to change. The reason probably is that I have nothing to fall back on. My sole education consists of the traditional approach to learning and teaching, consequently any change must come through trial and error which is a very slow process and often is most discouraging.

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